

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BRAZIL

ACRE SUSTAINABLE DEVELOPMENT PROGRAM

(BR-0313)

LOAN PROPOSAL

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ABBREVIATIONS

EEZ	Economic-Ecologic Zoning Studies
EIA	Environmental Impact Assessment
EMATER/AC	Empresa de Asistencia Técnica y Extensión Rural de Acre
FNMA	Fondo Nacional de Medio Ambiente
FUNTAC	Fundación de Tecnología del Estado de Acre
GEF	Fondo Global Ambiental
IDB	Inter-American Development Bank
IMAC	Instituto de Medio Ambiente de Acre
INCRA	Instituto Nacional de Colonización y Reforma Agraria
ITERACRE	Instituto de Tierras de Acre
IU	Implementing Unit
KfW	Kreditanstalt fuer Wiederaufbau
ITTO	International Tropical Timber Organization
GDP	Gross Domestic Product
PMACI	Protección del Medio Ambiente y de las Comunidades Indígenas
PNMA	Programa Nacional de Medio Ambiente
PPG7	Programa Piloto de Bosques Tropicales
PPTAL	Programa Integrado de Protección a las Poblaciones y Tierras Indígenas de la Amazonía Legal
RIMA	Relatorio de Impacto Ambiental
SECTMA	Secretaría de Estado de Ciencia, Tecnología y Medio Ambiente
SEFE	Secretaría Ejecutiva Forestal y Extractivismo
SEIAM	Sistema de Información Ambiental
SENAI	Servicio Nacional de Aprendizaje
SEPLAN	Secretaría de Planeación y Coordinación
SEPRO	Secretaría de Estado de Producción
SINFRA	Secretaría de Estado de Infraestructura
SITACRE	Sistema Estadual de Información de Uso y Tenencia de la Tierra
WWF	Fondo Mundial para la Naturaleza

BR-0313

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This map has not been approved by any competent authority and its inclusion in the loan document has the exclusive objective of indicating the area of influence of the project proposed for financing.



BRAZIL

IDB LOANS

APPROVED AS OF FEBRUARY 28, 2002

	US\$ Thousand	Percent
TOTAL APPROVED	23,546,502	
DISBURSED	17,753,251	75.4%
UNDISBURSED BALANCE	5,793,251	24.6%
CANCELLATIONS	1,354,934	5.8%
PRINCIPAL COLLECTED	5,945,271	25.2%
APPROVED BY FUND		
ORDINARY CAPITAL	21,858,849	92.8%
F W D FOR SPECIAL OPERATIONS	1,558,545	6.6%
OTHER FUNDS	129,108	0.5%
OUTSTANDING DEBT BALANCE	11,807,980	
ORDINARY CAPITAL	11,389,290	96.5%
FUND FOR SPECIAL OPERATIONS	418,171	3.5%
OTHER F W D S	518	0.0%
APPROVED BY SECTOR		
AGRICULTURE AND FISHERY	942,599	4.0%
INDUSTRY, TOURISM, SCIENCE - TECHNOLOGY	5,823,188	24.7%
ENERGY	2,267,153	9.6%
TRANSPORTATION AND COMMUNICATIONS	3,757,320	16.0%
EDUCATION	847,141	3.6%
HEALTH AND SANITATION	2,853,985	12.1%
ENVIRONMENT	579,987	2.5%
URBAN DEVELOPMENT	2,188,791	9.3%
SOCIAL INVESTMENT AND MICRO ENTERPRISE	2,861,327	12.2%
REFORM PUBLIC SECTOR MODERNIZATION	1,078,930	4.6%
EXPORT FINANCING	244,977	1.0%
PREINVESTMENT AND OTHER	101,103	0.4%

*Net of cancellations with monetary adjustments and export financing loan collections



BRAZIL

TENTATIVE LENDING PROGRAM

US\$ Millions			
2002			
BR0301	NORTHEAST MICROENTERPRISE	30.0	APPROVED
BR0355	SANTA CATARINA HIGHWAYS STAGE IV	150.0	APPROVED
BR0323	PRODETUR II Northeast Region	240.0	APPROVED
BR0357	PARA URBAN DESENVOLVIMENTO (PARA URBE)	48.0	
BR0313	ACRE SUSTAINABLE DEVELOPMENT	63.0	
BR0364	DIVERSITY IN UNIVERSITY	5.0	
BR0351	GOIANIA WATER AND SANITATION	50.0	
BR0367	TERMOACU CO-GENERATION POWER PROJECT	20.0	
BR0374	URBAN PARANA	100.0	
BR0378	ETHICS PROGRAM FOR THE PUBLIC ADMINISTRATION	3.0	
BR0365	MODERNIZATION COMPTROLLER OFFICE	5.0	
BR0370	CAMPOS NOVOS HYDROELECTRIC POWER PROJECT	75.0	
BR0254	FLOPUANOPOLIS-OSORIO HIGHWAY MODERNIZ.	300.0	
BR0324	CEARA SANITATION II	100.0	
BR0302	FORTALEZA URBAN TRANSPORT	86.2	
TOTAL A		1,275.2	
BR0377	Electropaulo Partial Credit Guarantee	75.0	
BR0372	São Paulo Fiscal Administration	15.0	
BR0369	STATE REFORM SECTOR LOAN	500.0	
BR0366	INCREASE ELECTRIC POWER SUPPLY	600.0	
BR0318	PRODETUR SUL	200.0	
BR0363	SALVADOR URBAN TRANSPORT	34.0	
BR0368	CARIOBA II THERMOELECTRIC POWER PROJECT	74.5	
TOTAL B		1,498.5	
TOTAL 2002		2,773.7	
2003			
BR0373	Promotion of Cultural Development	10.0	
BR0297	NATIONAL FOOD/AGRICULTURAL RESEARCH SYST	60.0	
BR0356	Espirito Santo Highways	73.0	
BR0358	FINANCING OF PRIVATE DELIVERY OF SOC. SER	200.0	
BR0375	URBAN TRANSPORTATION CURITIBA2	40.0	
BR0376	SUSTAINABLE DEVELOPMENT IN AMAPA	21.0	
BR0371	Sao Paulo Line #5	175.5	
TOTAL A		579.5	
BR0333	ENVIRONMENTAL DEV. JALAPA0 TOOCANTINS	0.0	
BR0266	NEW IRRIGATION MODEL	90.0	
TOTAL B		90.0	
TOTAL 2003		669.5	



INTER-AMERICAN DEVELOPMENT BANK
Regional Operations Support Office
Operational Information Unit

BRAZIL

STATUS OF LOANS IN EXECUTION AS FEBRUARY 28, 2002

(Amounts in US\$ thousands)

APPROVAL PERIOD	NUMBER OF PROJECTS	AMOUNT APPROVED	AMOUNT DISBURSED	% DISBURSED
Before 1996	11	2,601,100	2,304,417	88.59%
1996 - 1997	14	2,493,265	1,228,569	49.28%
1998 - 1999	15	2,810,000	1,208,931	43.02%
2000 - 2001	17	2,606,891	182,312	6.99%
2002	2	180,000	0	0.00%
TOTAL	59	10,691,256	\$4,924,229	46.06%

* Net of Cancellations . Excluding export financing loans.

ACRE SUSTAINABLE DEVELOPMENT PROGRAM

(BR-0313)

EXECUTIVE SUMMARY

Borrower:	State of Acre		
Guarantor:	Federative Republic of Brazil		
Executing agency:	State Secretariat for Planning and Coordination (SEPLAN)		
Amount and source:	IDB: (OC)	US\$	64.8 million
	Local:	US\$	43.2 million
	Total:	US\$	108.0 million
Financial terms and conditions:	Amortization Period:	20	years
	Grace Period:	4	years
	Maximum Disbursement Period:	4	years
	Minimum Disbursement Period:	3	years
	Interest Rate:	variable	
	Supervision and Inspection:	1.00	%
	Credit Fee:	0.75	%
	Currency:	Single Currency Facility	
Objectives:	The general objective of the Program is to improve the quality of life of the population and to preserve the natural wealth of the State of Acre in the long term.		
Description:	The Program is made up of three components:		
	1. Sustainable management and conservation of natural resources (US\$ 17.2 million). This component will modernize the State's capacity for environmental management and will ensure the efficient use of natural resources. The activities to be financed will be aimed at: (i) resolving the irregular land tenure situation in the State; (ii) creating and administering a state system for the conservation of protected natural areas, as well as implementing three comprehensive protection units in a total of 220,000 ha and protecting the surroundings of the Serra do Divisor National Park; (iii) continuing to improve the institutional capacity of the state government to implement the environmental legislation; and (iv) valuing the cultural identity of 12 indigenous groups that have been recognized in Acre, and of extractivist and riverine populations.		
	2. Support and promotion of sustainable productive		

development and employment (US\$ 36.5 million). This component seeks to increase the rate of growth of the agriculture and forestry sector and to generate employment. The following will be financed: (i) developing the technical capacity that is critical for the efficient, relevant, and cost-effective provision of services to generate and transfer agricultural and forestry technology; (ii) supporting traditional populations and small producers; (iii) long-term strengthening of permanent sanitary services for agriculture and forestry in Acre; (iv) creating the institutional framework necessary for the efficient management and regulation of the sustainable exploitation of forestry resources, as well as the creation and implementation of four state production forests on one million hectares, for the harvesting of certified forest products; and (v) fostering productive investments that increase the competitiveness of strategic sectors or products with comparative advantages in Acre that generate employment and do not harm the fragile environment.

3. Public infrastructure for development (US\$ 33.4 million).

The purpose is to cut the transportation costs and increase access to rural electrification in Acre. The following will be financed: (i) paving 70.1 km of an isolated section of highway BR-364, as well as the respective final engineering designs, and the supervision and environmental audit of works; (ii) improving the navigability of the rivers in the state; and (iii) providing electrical energy to isolated rural communities.

Bank's country and sector strategy:

The following are the main elements of the Bank's strategy in Brazil: (i) to promote and further the reform and modernization of the public sector, at both the federal and state levels; (ii) to support efforts to improve the competitiveness of and market access for Brazilian goods; (iii) to support the efforts to reduce social inequalities and poverty; and (iv) to address the problems of environmental and natural resources management, with emphasis on protection for vulnerable ecosystems.

The proposed operation supports the four elements of this strategy. First, the Program includes activities to strengthen both the capacity for environmental management and the services to foster productivity, by promoting modernization of the public sector at the state level. Second, by improving the quality of the transportation infrastructure and promoting highly profitable businesses in the State, the Program will support the effort to bolster competitiveness. Third, the proposed Program includes actions to foster the productivity of rural communities and small producers with incomes below the poverty line, thereby supporting efforts to reduce social inequalities and poverty. Fourth, the

proposed Program addresses the environmental and natural resource management problems through actions for conservation and protection of Amazon rainforest.

**Environmental/
social review:**

The environmental strategy of the State authorities supported by the proposed Program consists of limiting the expansion of the agricultural frontier to a maximum of 16% of the total area of Acre over the course of 20 years, reducing the rate of deforestation to 0.3% annually. This goal will be attained by (i) expanding the State's protected areas from 33.5% to 58% of the territory; (ii) developing sustainable forestry activities; (iii) consolidating the occupied area in the southeast part of the State by increasing agricultural productivity and seeking economic alternatives to reduce pressure on the land; and (iv) strengthening the state's capacity for environmental monitoring and control of Acre. The Program was specially designed to attain Acre's development by addressing the existing environmental liabilities (e.g. degradation of deforested areas) and, in particular, avoiding new negative impacts in the future. Therefore, the main socio-environmental problems that can be foreseen would occur in the event that the Program's actions are not carried out as anticipated.

It is expected that paving 70.1 km of the isolated section of highway BR-364 will not lead to the problems caused by similar works in the Amazon region because: (a) the section is 450 km from the next paved section, and so would not allow for the flow of possible immigrants from other states or from southeast Acre; and (ii) 95% of the section to be built will be protected by the proposed state forest in the area of influence and by the Katukina Indigenous Reserve, reducing any efforts to settle or deforest. Nonetheless, in addition to the mitigation plan already being carried out by the Acre state government, the Program includes actions to clarify property rights to the land and strengthen the capacity for environmental supervision and oversight in the area impacted by this highway construction.

Benefits:

The main economic benefits expected from the Program will be brought about by: (i) the foregone losses of biodiversity, resources, and carbon sequestration from the conservation of 352,000 ha, by diminishing the annual rate of deforestation from 0.4% to 0.3% over 20 years; (ii) the net return from the sustainable harvesting of forest resources amounting to one million hectares of state forests; and (iii) the net expected benefit from the recovery of 450,000 hectares of degraded lands and conversion to environmentally sustainable agricultural activities of 30,000 ha of pastureland (10% of the total in each case).

Risks:

The paving of the proposed section of highway BR-364. The construction of highway BR-364 in the 1970s made it possible to

integrate Acre, Rondônia, and northern Mato Grosso into the rest of the country. Nonetheless, the lack of adequate land management led to its disorderly occupation and the development of agricultural activities with a low rate of return that spurred on the deforestation of these areas. To minimize these possible impacts, the paving of 70.1 km of highway BR-364 has been conditioned on first completing the following activities in the area of influence of the road-building activity: (i) clarifying property rights in the municipality of Tarauacá; (ii) the establishment of a state production forest; (iii) strengthening the environmental oversight units; (iv) instituting environmental licenses; and (v) evidence of private-sector interest in sustainable forestry exploitation in the state production forests.

Change in the priorities of the State of Acre. The Program fits within the strategic vision of equitable growth of the local economy and preservation of the natural wealth of the Amazon, embraced by the Acre state government. A change in the strategic vision would affect the Program's implementation and the attainment of its objectives. To minimize this risk, the Program has been designed to enable civil society to participate in supervising its implementation. To this end, the Commission for Evaluation and Monitoring of the Program has been created, with representatives of the public sector, both federal and state, indigenous organizations, labor groups, business associations, and local and national non-governmental organizations, and should serve as a forum for consultation, dissemination of results, and taking in suggestions. It is expected that it will be the mechanism which, through twice-yearly meetings and field visits financed from resources of the proposed Program, will make it possible to minimize changes that would limit attainment of the Program's objective.

**Special
contractual
clauses:**

Conditions precedent to the first disbursement of the loan

- (i). Creation of the Implementing Unit, and formal designation of its coordinator (§3.4).
- (ii). Publication of the call for bids for the selection and hiring of the management firm for the Program (§3.7).
- (iii). Creation of the Commission for Evaluation and Monitoring of the Program (§3.8).
- (iv). Entry into force of the Operating Regulations of the subcomponent *Support for traditional populations and small producers* previously agreed upon with the Bank, and the corresponding law (§3.23).
- (v). Entry into force of the Operating Regulations of *the Business Promotion* subcomponent previously agreed upon with the Bank, and the corresponding law (§3.29).
- (vi). Opening of exclusive and separated ban accounts for the

use of loan and local counterpart resources(¶3.49).

Conditions precedent to the first disbursement of subcomponents:

- (i). *Land management*: Submission of: (i) the signed agreements between ITERACRE and INCRA, IMAC, the Judicial Branch of the State of Acre (¶3.10) and SEPRO that regulate implementation of the subcomponent (¶3.12); and (ii) the technical-operational manual for the process of regularizing property rights (¶3.11).
- (ii). *Support for traditional populations and small producers*: Submission of the model agreement between SEPLAN and the beneficiaries (¶3.21).
- (iii). *Business promotion*: Submission of the model agreement between SEPLAN and the beneficiaries (¶3.27).
- (iv). *Alternative energy*: Submission of the model agreement among SEPLAN, SINFRA, and the beneficiary entity that will govern operation and maintenance of the systems (¶3.34).

Other Conditions:

- (i). Eight months after signing the agreement, hiring of the Program management firm (¶3.7).
- (ii). Prior to the call for bids for the work and equipping of the center for forestry training, and for the management and processing of timber (Generation and transfer of technology subcomponent), submission of the agreement between SENAI and FUNTAC for operation and maintenance of the facilities (¶3.17).
- (iii). Prior to issuing the call for bids for the paving of the Rio Liberdade-Rio Tauari section of highway BR-364, (i) submission of the final engineering designs (¶3.30); (ii) contracting the supervision and environmental audit (¶3.31); (iii) culmination of the public presentation of results from the cadastral survey in the municipality of Tarauacá, the creation of the state forest and the installation and operation with appropriate staff of two surveillance posts of the Acre Environment Institute in the area of influence (¶3.42); and (iv) submission of a roster, prepared by public invitation, of firms interested in the sustainable forestry exploitation of the state production forest in the area of influence (¶3.43).
- (iv). Prior to the call for bids for paving the Rio Tauari-Igarape Santa Fé section; (i) having initiated the works in the Liberdade River-Tauari River section; and (ii) having adjudicated the exploitation of no less than 35,000 hectares in the state production forest (¶3.43).

- (v). Prior to the call for bids for rehabilitation of the access road to the Cachoeira Agro-Extravist Project, submission of the corresponding updated project proposal for rehabilitation (§3.32).
- (vi). Prior to the public call for bids for civil works, submission of the respective environmental license and compliance with other environmental conditions that may be required (§3.45).
- (vii). Six months after signing the agreement, submission of the methodology and baseline indicators for performing the ex-post evaluation of the Program, and 24 months after the last disbursement, submission of the ex-post evaluation (§3.56).

Poverty-targeting and social equity classification:

This operation qualifies as a social equity enhancing project, as described in the indicative targets mandated by the Bank's Eighth Replenishment (document AB-1704). Furthermore, this operation qualifies as a poverty targeted investment (PTI) (see ¶ 4.23 and 4.24). The borrowing country will not be using the 10 percentage points in additional financing (see ¶ 2.18).

Exceptions to Bank policy:

None

Procurement:

Current Bank policy will be applied for the procurement of goods and the contracting of works and consulting services to be financed by Program resources. Consultants shall be hired in keeping with the procedures indicated in document GN-1679-3, which allows for the contracting of consultants using price as the criterion for evaluation, as well as the selection of fixed-price consultants. With respect to contracting based on quality and price, the relative weight of price as a criterion for evaluation can be no more than 30%; accordingly, the technical element of quality of the bid must account for at least 70% of the relative weight. International public bidding will be compulsory for procurement where the value is in excess of US\$ 350,000 for goods and services, US\$ 5,000,000 for contracts for the construction of works, and US\$ 200,000 for consulting services.

I. FRAME OF REFERENCE

A. Socioeconomic and environmental conditions in Acre

- 1.1 The state of Acre is located in the far west of Brazil, bordering on both Peru and Bolivia. Its total area is 16.5 million hectares. The population is nearly 550,000, including many descendants of colonizers from the Brazilian Northeast who were attracted to the region by the high profits to be had from extracting latex during the rubber boom (1850-1912), and later to collect Brazil nuts. As the economic development of Acre has historically been based on tapping forest resources, its natural wealth has been preserved.

- 1.2 Nonetheless, the fall in the international price of natural latex in recent decades, with the appearance of lower-cost synthetic latex, led to a systematic reduction in the production of

Table 1.1 Indicators and living conditions, 1996

Indicator	Acre	Brazil
Human development index	0.754	0.830
Infant mortality (per 1,000 live births)	59.1	34.8
Life expectancy at birth (years)	67.0	67.6
Adult literacy (%)	70.2	85.3
Combined enrollment rate (%)	74.1	76.8
Per capita GDP (reals)	5,741	6,491

Source: UNDP/IPEA/FJP/IBGE, 1998.

natural rubber. The production of natural rubber in 2000 accounted for just over 40% of the level existing in 1977. This diminution in extractivist forestry activity led to (i) a steady decline in real per capita GDP in Acre – this rate averaged - 2.6% per year from 1990 to 1998; (ii) major dependence of the economy on transfers from the Federal Government and the activity of the public administration (44% of Acres' GDP); and (iii) living conditions far below the national average (Table 1.1). In addition, the productive apparatus of the State came to be concentrated in very low-productivity agricultural activities which, considering the poverty of the soils and the lack of appropriate technology, have been encouraging deforestation. The end result has been a vicious circle of poverty-deforestation-environmental degradation. The environmental impact of this activity has resulted in the deforested area of Acre increasing from 1.6% in 1978 to 9.7% in 1998, at an average rate of deforestation of 0.4% per year (the annual rate of deforestation in Brazil is 0.8%, on average).

B. The causes of poverty-deforestation-environmental degradation cycle

- 1.3 In order to achieve sustainable rates of growth and a consequent improvement in the quality of life of the population, it is necessary to break the poverty-deforestation-environmental degradation cycle. This requires simultaneously addressing three critical problems that cause it: (i) open access to land; (ii) the low economic rate of return in traditional agriculture; and (iii) the deficient transportation and rural electrical infrastructure, which reduces Acre's competitiveness.

1. Open access to land

- 1.4 Open access to land in the Amazon region has facilitated expansion of the agricultural frontier in tropical forest areas, and in so doing has created ongoing social conflicts. In Acre, two factors define this characteristic of the land: (i) the lack of clearly defined land tenure, and (ii) the lack of an adequate system to control land use.
- 1.5 In the first case, the lack of property titles in many settlements and agrarian colonies or concession contracts for the use of extractive reserves, the small number of protected public areas for conservation, as well as the lack of up-to-date, systematized cadastral and registry information that is consistent with the reality on the ground all stand in the way of a clear definition of property rights to the land. While the current legal framework establishes the guidelines for the Government to be able to resolve these land tenure problems, work along these lines has been minimal due to the incipient public institutional capacity. It was only in March 2001 that the Acre Land Institute (ITERACRE) was created; it is an autonomous entity under the Secretariat for Production (SEPRO), aimed at promoting and carrying out the processes of land tenure regularization in the state, as well as organizing and updating the cadaster of rural properties.
- 1.6 As regards the capacity to control land use, the state of Acre has made strides in soil use, with ecological-economic zoning (EEZ) studies. Nonetheless, the state government's prevention, surveillance, oversight, and environmental licensing actions, especially to prevent deforestation or conversion of forest lands, are very limited. While the environmental laws establish policy guidelines, define the mechanisms for state intervention, and develop the criteria and procedures for addressing and penalizing environmental violations, their implementation is limited by the current operational capacity of the Acre Environment Institute (IMAC), the state's environmental authority, and other agencies that support environmental management in Acre. For example, the IMAC can process only 17% of the demand for authorizations or licenses each year, and can follow up on only 5% of them. The IMAC has drawn up a plan to recruit new personnel to comply with the environmental laws. Nonetheless, the IMAC still needs to implement adequate procedures, modern infrastructure, trained personnel; it also needs available and systematized information for decision-making, appropriate inter-institutional coordination, and broad dissemination of results to the community.

2. Low economic rate of return of traditional agriculture

- 1.7 Once deforested, 80% of the lands of Acre are used for extensive livestock with a very low rate of return. The limited adoption of technologies for the training, improvement, and management of pastures, the lack of work to recover and renew degraded soils, and the deficient use of appropriate sanitary practices result in internal rates of return no greater than 4%. A similarly low rate of return is attained by subsistence family agriculture in the remaining 20% of the deforested

area. The lack of sustainable flows of net income makes it impossible to break the vicious circle of poverty-deforestation-environmental degradation.

- 1.8 The state's actions to turn around these economic activities have been very limited. The effectiveness of agricultural services in the public sector of the state of Acre (generation and transfer of technology, and sanitation) is limited as there are no modern systems for planning, monitoring, and evaluation in the responsible agencies, there are no strategic lines that draw on efforts made in other private or public agencies, whether federal or state, there are no incentives for promoting innovation or for generating income, the beneficiaries' participation in financing is minimal and the financing does not serve as an incentive for results-based demand, and the existing infrastructure is precarious, the equipment is obsolete, and the professional personnel have not kept up-to-date.
- 1.9 In addition, specific actions to foster alternative economic activities that are more profitable and have a lesser environmental impact are limited. In this sense, various extractivist products and sustainable forestry offer alternatives for diversifying Acre's productive base, and have the potential to become sources of employment and motors of alternative development in the Amazon region. In order to establish the adequate normative framework for the management of forest resources and to foster sustainable investment in state production forests, the State Government approved the State Forestry Law in December 2001. This law determines the incentives for combating predatory exploration and exploitation with low rates of return in the rural sector, while also establishing criteria and supervision for the actions to make sustainable use of the state production forests. Nonetheless, the current institutional capacity of the public sector still needs to be strengthened to perform these functions, and specific actions are needed to develop the timber and non-timber forestry sector, including the development of an active policy to identify and promote Amazonian products with economic potential.

3. Deficient quality of the transportation and energy supply infrastructure

- 1.10 Due to the geographic location of Acre, the cost of transportation is a fundamental factor for determining the economic rate of return of economic activities in the rural sector. The transportation network is made up of 2,266 kilometers of highway (federal and state), and 4,226 kilometers of rural roads, mainly concentrated around Rio Branco, the state capital. The state's territory is connected, from east to west, by highway BR-364, 60% of which is passable only three months of the year. The responsibility for maintaining federal roads is delegated to the state government. In addition to the roads, there are some 8,000 kilometers of rivers and smaller affluents, whose use as a means of transportation is restricted by the lack of bathymetric information, the lack of piers and ramps, or by their periodic obstruction, which hinder navigability. Both the availability and conditions of the transportation infrastructure directly impact the level of competitiveness of an economy, as it has a direct impact on marketing costs.

- 1.11 Another factor limiting economic development and improvement of the quality of life in the rural sector is energy. Acre has one of the lowest indices of rural electrification in Brazil (5%), and requires investments in sources of energy that are alternatives to thermal generation of electricity or the use of firewood.

C. Strategic vision of the Government of the State of Acre

- 1.12 The strategy of the current State Government has three main lines of action: (i) economic development based on the sustainable use of Acre's natural resources; (ii) the equitable growth of the incomes of the population; and (iii) conservation of the State's cultural diversity. The economic and social actions taken to implement this strategy include, in the case of sustainable economic development, support for the production of natural rubber (Chico Mendes Law), the culmination of the EEZ studies, and approval of the Forestry Law of the state of Acre. As regards equitable growth of income, the Government has been implementing a social protection program for the poorest sectors (*Adjunto da Solidariedade*). In the area of conserving cultural diversity, the state government has formalized channels of ongoing consultation and information with minority groups on the actions undertaken by the State.
- 1.13 This proposed Program fits within one of the three lines of action of the state government's strategy. First, the Program includes actions to strengthen the capacity for environmental and natural resource management, modernization of the services for fostering productivity, and improvement of the transportation infrastructure, which are consistent with the line of sustainable economic development. Second, on fostering profitable productive activities in low-income rural communities and small producers, it contributes to the line of equitable growth of incomes. Third, the Program includes actions to preserve traditional cultures, supporting the line of conserving the existing cultural diversity.

D. Action of the Bank and other international agencies in Acre

- 1.14 From 1985 to 1995, the Bank had a presence in Acre through the Porto Velho-Rio Branco Highway Project (150/IC-BR and 503/OC-BR), which made it possible to pave highway BR-364 in the section that connects the capital of Rondônia to the capital of Acre. That operation had an environmental component (Project for Protection of the Environment and the Indigenous Communities – PMACI) with actions in the area of land use management, environmental oversight, forestry extension work, environmental education, and support for indigenous communities. The total cost of the operation was US\$ 167 million, the cost of the PMACI being US\$ 10 million. Implementation began in 1985, and concluded in 1995. In 1988 the Bank interrupted implementation, as it considered that the Definitive Action Plan submitted by the *Departamento Nacional de Estradas e Rodagem*, the implementing agency, was an inconsistent document that was inadequate to address the socio-environmental impacts of the paving of highway BR-364, and that it did not open the way to local participation. Once the disbursements resumed in 1989, the responsibility for implementation was shifted

to the Environment Ministry (*Ministério de Meio Ambiente, dos Recursos Hídricos e da Amazônia Legal*), and there was civil society participation in monitoring the Program. The design and implementation of the PMACI yielded the following lessons, which have been incorporated into the Program proposed here:

- a. *Environmental projects that affect traditional communities require the active participation of the communities affected from their design until their final implementation.* During the preparation of the proposed Program, civil society and the beneficiaries participated through the Commission for Evaluation and Monitoring created for that purpose. A total of 52 members participated in 12 consultation meetings; suggestions and recommendations were incorporated into the design of the operation. During implementation, the same mechanism for participation is to be kept in place.
- b. *Decentralization of the implementation of sustainable development projects to the local organizations and the participation of civil society institutions accompanying implementation reduce the possibility of conflicts and allows for an appropriate pace of implementation.* The proposed Program will be implemented by the public sector at the state level, and includes mechanisms for ongoing community participation for supervision and monitoring.
- c. *The mechanisms for the participation of the beneficiaries of socio-environmental projects should be provided for and agreed upon in the loan agreement.* The proposed Program considers the creation, by law, of the Commission for Evaluation and Monitoring of the Program prior to the first disbursement of the loan.

1.15 Through the Program of Support to the National Environmental Fund (FNMA) (883/SF-BR and 1013/SF-BR), support has been given to the implementation of environmental projects in Acre since 1990. To date, 34 projects have been implemented for a total of R\$ 3.3 million in the areas of forestry extension, sustainable natural resource management, conservation units, research and technological development, environmental education, environmental control, and institutional strengthening. Within the Program for the Development of Ecotourism in Amazônia Legal (1216/OC-BR), an ecotourism strategy is being prepared for Acre. A non-reimbursable technical cooperation (ATN/JF-3934-BR) financed actions for education, health, forestry research, and community development in four extractivist settlements. A new technical cooperation (ATN/JF-6980-BR) is extending strengthening of the community model of development in new extractivist settlements, introducing productive community development actions.

1.16 Acre also benefitted from contributions from the Pilot Program for Tropical Forests (PPG7), financed by Germany and other countries, and from the National Environmental Program (PNMA I), financed by the World Bank. The International Tropical Timber Organization (ITTO) developed a pioneer project in

the Antimari State Forest, planning its forestry management. Acre has also received support from bilateral technical assistance agencies, including from Canada. In the area of environmental management, the State Government will receive support for the strengthening licensing and control actions through PNMA II, recently approved by the World Bank, and from the Integrated Environmental Management Program financed by the Government of. In addition, the state receives assistance through a GEF/WWF project to establish some new conservation units with integral protection. The interventions provided for in the Program proposed here are complementary to those that the State is developing with other sources of assistance.

E. The Bank's strategy in Brazil

- 1.17 The Bank's strategy in Brazil has the following main elements: (i) promoting and deepening the reform and modernization of the public sector at both the federal and state levels; (ii) supporting efforts to improve the competitiveness of and market access for Brazilian goods; (iii) supporting efforts to reduce social inequalities and poverty; and (iv) addressing the problems of environmental and natural resource management, with an emphasis on protecting vulnerable ecosystems.
- 1.18 The proposed operation supports the four elements of this strategy. First, the Program includes activities to strengthen both the capacity for environmental management and the services to foster productivity, promoting modernization of the public sector at the state level. Second, by improving the quality of the transportation infrastructure and promoting highly-profitable businesses in the State, the Program will support the effort to bolster competitiveness. Third, the proposed Program includes actions to foster the productivity of rural communities and small producers with incomes below the poverty line, thereby supporting efforts to reduce social inequalities and poverty. Fourth, the proposed Program addresses the problems of environmental and natural resources management with actions for the conservation and protection of the Amazonian rainforest.

F. Design of the Program

- 1.19 Breaking the poverty-deforestation-environmental degradation cycle is a necessary condition for increasing economic growth and improving the quality of life of the population in Acre. In this sense, the Program will lay the bases for the long-term sustainable development of the state, preserving its natural resources. To this end, the Program is based on two complementary lines of action, one environmental, the other economic.
- 1.20 From the environmental standpoint, the Program will limit the expansion of the agricultural frontier, diminishing the current rate of deforestation, by reducing access to natural resources. This will be attained by strengthening the capacity for environmental regulation of the public sector at the state level, especially as

regards surveillance and control; expanding the protected areas in the state; and clarifying property rights in the land.

- 1.21 From the economic standpoint, the Program will foster the economic growth of the State by promoting investment in sustainable forestry activities so as to adequately tap the natural resources, and it will consolidate the occupation of already-deforested geographic areas by developing economic activities that are alternatives to extensive stock-raising or low-yield farming, and increasing competitiveness by modernizing the services that foster productivity and improving the quality of the public infrastructure.
- 1.22 The proposed Program has been structured such that the investments in road transportation infrastructure will be economically viable and implemented once the capacity for environmental management, surveillance, and control is in place in the area of influence, so as to minimize deforestation. In addition, actions to bolster productivity will be undertaken in deforested areas as a disincentive to expansion into new tropical forest areas.

II. THE PROGRAM

A. Objectives

- 2.1 The Program's general objective is to improve the quality of life of the population and preserve the natural wealth of the State of Acre in the long term.
- 2.2 2.2 The Program has three specific purposes: (i) to modernize the State's capacity for environmental management and ensure the efficient use of natural resources; (ii) to increase the rate of growth of the forestry and agriculture sector and generate employment; and (iii) to cut of transportation costs and increase access to rural electrification in Acre.

B. Description of the components

- 2.3 The three purposes would be attained, respectively, with the implementation of the three components: (i) Sustainable management and conservation of natural resources; (ii) support and promotion of productive development and employment; and (iii) public infrastructure for development. Following is a description of the actions pertaining to these components.

1. Sustainable management and conservation of natural resources (US\$ 17.2 million)

- 2.4 This component will be developed through the following subcomponents: (i) land management; (ii) establishment and management of protected areas; (iii) strengthening the environmental management system; and (iv) supporting the preservation of traditional cultures.
- 2.5 Land management (US\$ 7.9 million). This includes: (i) implementing the geodesic network in Acre; (ii) identifying, regularizing, and performing a cadastral survey of 4.7 million hectares (20% of the total area of the state), registering 5,700 titles vesting private property rights in the land, 1,840 definitive property titles in settlements of the Institute of Colonization and Agrarian Reform (INCRA), and 3,200 concession use contracts in 107 extractivist localities, demarcating four conservation units for direct use and three state parks, and drawing up an inventory of irregular occupations in the state; (iii) support for the entry of deeds and titles in the real property registry that emerges from the land tenure regularization effort; (iv) the design and implementation of the State Information System on Land Use and Land Tenure (SITACRE) in the municipalities of Feijó, Tarauacá, and Cruzeiro do Sul for strengthening the capacity for administration, management, and updating the cadastral and registry information in Acre; and (v) support for the operation of ITERACRE through the construction, in Rio Branco, of the main offices, and the refurbishing of three offices in the municipalities of Feijó, Tarauacá, and Cruzeiro do Sul, and equipment and technical assistance to coordinate and supervise the activities involved in land tenure regularization.

- 2.6 Establishment and management of protected areas (US\$ 3.0 million). This includes: (i) creating and managing the State System of Protected Natural Areas, by preparing a plan for implementing the System and studies on biodiversity and conservation; technical assistance for administering the System; and personnel training for managing the System; (ii) the implementation of three conservation units for comprehensive protection on 220,000 hectares by preparing socio-environmental studies and management plans, including public consultations in the municipalities benefitted; and building access roads and building and equipping the control posts; and (iii) protecting the environment in and around the Serra do Divisor National Park by drawing up environmental management plans for three INCRA settlement projects, and strengthening the participation of municipalities and civil society in the sustainable management of the area in and around the Park. The indigenous groups will be authorized to participate in preparing the environmental management plans, thereby drawing on their knowledge of the cultural uses of natural resources.
- 2.7 Strengthening the environmental management system (US\$ 5.2 million): In order to continue improving the institutional capacity of the State Government to enforce the environmental legislation, especially with respect to land, the subcomponent includes: (i) designing and implementing the State Environmental Information System (SEAIM); (ii) the training of 220 staff from the environmental management and control system in areas such as standard-setting, control, oversight, and surveillance; environmental education actions in 20 productive partnerships on environmental standards and watershed management; and the design, publication, and dissemination of the teaching materials and procedural manuals for licensing; (iii) performing basic studies for decision-making on environmental matters, such as the strategic plan for environmental management, improving the EEZ, water resource management, inventory of environmental users, and operational rules; (iv) support for IMAC for supervising the design and implementation of the SEIAM, strengthening four regional offices of the IMAC, and facilitating start-up of the laboratory for wastewater analysis; (v) equipping and remodeling the regional IMAC offices in Feijó and Assis Brasil, the Fire Department and the wastewater laboratory; and (vi) procuring the vehicles and equipment for field work and communications. In addition, it includes rental of helicopter services and aerial photography equipment to strengthen IMAC's forest surveillance actions.
- 2.8 Support for preserving traditional cultures (US\$ 1.1 million). This includes preparing an Inventory of Traditional Cultures; creating a systematized data base on culture and the design and implementation of a plan to disseminate the research; the construction and equipping of five centers for cultural dissemination to uphold the value of the cultural identity of the 12 indigenous ethnic groups recognized to exist in Acre and extractivist and riverine populations; and the equipping of the Elías Mansour Foundation for Culture and Communication, the agency responsible for protecting and promoting the culture of the indigenous groups and other traditional populations of Acre.

2. Support and promotion of the sustainable productive development and employment (US\$ 36.5 million)

- 2.9 This component includes the following subcomponents: (i) Generation and transfer of technology; (ii) support for the traditional populations and small producers; (iii) sanitary defense and inspection; (iv) forestry resource management; and (v) business promotion.
- 2.10 Generation and transfer of technology (US\$ 4.9 million). This includes:
- a. As regards *generating technologies*: (i) preparing an institutional strategic planning study that includes a plan for functional and operational re-structuring; (ii) the design of a system for management and impact evaluation that includes technical, economic, and financial quantitative periodic indicators; (iii) strengthening the Foundation for Technology of the State of Acre (FUNTAC) by equipping the main office and training staff; (iv) remodeling and equipping the micro-propagation and seed laboratories, medical plant laboratories, and geo-processing and remote sensors; (v) travel and seminars for keeping up-to-date and to tie in to global networks; and (vi) providing equipment for and building a center for professional training in forestry and in management and processing in timber operations.
 - b. As regards *technological transfer*: (i) strengthening the functions of identifying productive and environmental problems and opportunities at the Enterprise for Technical Assistance and Rural Extension of Acre (EMATER/AC) by providing equipment and building seven municipal offices, four multi-institutional regional offices, and nearly 21 rural extension posts in isolated communities; (ii) designing and implementing a system for monitoring and evaluation of the cost impact by type of intervention and beneficiary; (iii) travel for technical continuing education for 24 staff; and (iv) training of personnel in the areas of environmental conservation, social organization, distance training, non-timber forest products, processing of agroforestry products, and methods of technological transfer.
- 2.11 Support for traditional populations and small producers (US\$ 15.5 million). This subcomponent seeks to promote environmentally and economically viable forestry and agriculture practices among organizations of family farmers, extractivists, riverine populations, and indigenous communities that work in extractive reserves in areas already deforested, whose incomes are below the poverty line. It includes the contracting of technical assistance, training, productive infrastructure, and procurement of equipment and supplies for (i) recovering degraded areas, (ii) fostering organic livestock production, (iii) fostering productive linkages, and (iv) the sustainable extraction of forest resources; the preparation of community development plans and specific studies of productive projects in these four lines of support; and the remodeling of an administrative office, hiring of consultants, and establishment of a system for monitoring and evaluating the investments made.

- 2.12 Sanitary defense and inspection (US\$ 0.8 million). It includes updating the phytosanitary and zoosanitary legislation of Acre; the preparation of a strategic planning study by the Department of Sanitary Defense and Inspection of the SEPRO; the design of a system for monitoring and evaluating management and impact; preparing technical, economic, environmental, and financial feasibility studies of actions for eradicating and controlling priority diseases and pests; and strengthening the Department by acquiring office and field equipment and supplies, and training human resources.
- 2.13 Forest resource management (US\$ 7.1 million). It includes drafting the regulations of the Forestry Law for the State of Acre and of the Law on the Organization of Public Interest Civil Society of the State of Acre; a strategic planning study for the Executive Secretariat for Forestry and Extractivism (SEFE); a study for developing forestry concession models; a study to value environmental services and biodiversity; the institutional strengthening of SEFE through the construction and equipping of the central office and four regional offices and human resources training; and the creation and implementation of four state production forests on nearly one million hectares by preparing management plans, holding public consultations, and preparing bidding documents, and technical and financial studies; and the construction of basic infrastructure for access and control.
- 2.14 Business promotion (US\$ 8.2 million). This subcomponent seeks to increase the competitiveness of strategic sectors or goods with comparative advantages in Acre that generate employment and do not attack the fragility of the environment. The following are the eligible activities in the three lines of action:
- a. *Strengthening and increasing the competitiveness of local enterprises and institutions.* Specialized consulting services in the areas of technological transfer, market research, training, and technical assistance for improving the profitability of enterprises, business associations, cooperatives or producers' associations of Acre.
 - b. *Marketing.* National and international marketing on a small scale, individually or through associations, including international contacts, business trips, participation in shows and events, and advisory services in contracts for enterprises, consortia of enterprises, or producers' organizations (federations, cooperatives, business associations), two generic marketing campaigns for products from Acre that show an effective potential and the real possibility of acceding to an international niche.
 - c. *Strategic demonstration effects.* Equipment and materials for implementing three pilot demonstration projects for associative sustainable forestry and pasture management.

3. Public infrastructure for development (US\$ 33.4 million)

- 2.15 Overland transportation (US\$ 30.5 million). This includes: (i) the rehabilitation of 27 km for access to the Cachoeira Agro-Extravist Settlement Project; (ii) the paving of 70.1 km of an isolated section of highway BR-364, the Rio Liberdade – Rio Tauri – Igarapé Santa Fe subsection, to facilitate the marketing of certified forest products from state production forests in the area; and (iii) the preparation of the final engineering designs, supervision costs, and environmental audit costs of the works on highway BR-364.
- 2.16 Improvement of the river network (US\$ 1.4 million). This includes building four small-scale ramps in the municipalities of Rio Branco, Porto Acre, Sena Madureira, and Tarauacá, leading centers of small-scale commerce among the riverine communities; the procurement of equipment, vehicles, and nautical charts, as well as training of personnel from the Executive Secretariat for Waterways and Airways to take a bathymetric survey of the rivers in the six main watersheds in the state (Juruá, Tarauacá, Envira, Purus, Iaco, and Acre); and the contracting of specialized services for clearing specific minor obstructions and procurement of goods for posting signs along part of the six above-mentioned rivers and their affluents (4,500 km).
- 2.17 Alternative energy (US\$ 1.5 million). This includes the procurement and installation of 102 solar energy systems for productive and social purposes in isolated rural/forestry communities: 18 centers for services and forestry support known as “*Centros de Florestania*” (55 systems), five conservation units for direct use, and three state forests (41 systems), and four community centers in settlement projects (six systems).

C. Cost and financing

- 2.18 The total cost of the Program comes to US\$ 108 million. The Bank will finance US\$ 64.8 million (60%) with resources from its ordinary capital. The local counterpart, in the amount of US\$ 43.2 million (40%), will be contributed by the Acre State Government. The following table shows the categories of investment and source of financing for each activity.

COST AND FINANCING
(in millions of US\$)

Category	Bank	Local	Total	%
I. Administration and supervision	4.2	3.1	7.3	6.8
Implementing unit	1.4	0.3	1.7	1.6
Management firm	2.8	-	2.8	2.6
Feasibility studies and designs	-	2.8	2.8	2.6
II. Direct costs	56.8	30.3	87.1	80.6
<i>1. Sustainable management and conservation of natural resources</i>	<i>12.7</i>	<i>4.5</i>	<i>17.2</i>	<i>15.9</i>
Land management	6.7	1.2	7.9	7.3
Establishment and management of protected areas	1.8	1.2	3.0	2.8
Strengthening the environmental management system	4.2	1.0	5.2	4.8
Support for preserving traditional cultures	-	1.1	1.1	1.0
<i>2. Support and promotion of sustainable productive development and employment</i>	<i>27.8</i>	<i>8.7</i>	<i>36.5</i>	<i>33.8</i>
Generation and transfer of technology	2.2	2.7	4.9	4.5
Support for traditional populations and small producers	13.1	2.4	15.5	14.4
Sanitary defense and inspection	0.4	0.4	0.8	0.7
Forest resources management	5.4	1.7	7.1	6.6
Business promotion	6.7	1.5	8.2	7.6
<i>3. Development of public infrastructure</i>	<i>16.3</i>	<i>17.1</i>	<i>33.4</i>	<i>30.9</i>
Overland transportation	15.1	15.4	30.5	28.2
Improving the river network	0.3	1.1	1.4	1.3
Alternative energy	0.9	0.6	1.5	1.4
III. Other costs	0.7		0.7	0.7
Audit	0.2		0.2	0.2
Commission for Evaluation and Monitoring	0.5		0.5	0.5
IV. Not specifically allocated	2,452	1.1	3,552	3.3
V. Financial costs	0.648	8.7	9,348	8.6
<i>1. Interest</i>		<i>7.7</i>	<i>7.7</i>	<i>7.1</i>
<i>2. Credit fee</i>		<i>1.0</i>	<i>1.0</i>	<i>0.9</i>
<i>3. FIV</i>	<i>0.648</i>		<i>0.648</i>	<i>0.6</i>
TOTAL	64.8	43.2	108.0	100

- 2.19 The loan will have the following conditions: (i) variable rate of interest; (ii) loan fee equal to 0.75% of the loan amounts not disbursed; (iii) inspection and surveillance costs equal to 1% of the total loan amount; (iv) maximum period of disbursement four years; (v) grace period of four years; (v) amortization period of 20 years.

III. PROGRAM IMPLEMENTATION

A. Implementation and administration of the Program

- 3.1 The implementing agency for the Program will be the State Secretariat for Planning and Coordination (SEPLAN) through an Implementing Unit (IU) to be created for that purpose. SEPLAN will have full responsibility over the administration of the resources and coordination and implementation of Program activities. In order to be able to carry out these responsibilities, SEPLAN will receive technical support from three State Secretariats that have sectoral responsibility in the Program's areas of action (SEPRO, SECTMA, and SINFRA), and from a management firm which, in addition to providing technical assistance, will provide the staff and resources necessary for the adequate performance of its functions. During implementation, civil society will have the same active role that it had in preparing the operation through the Commission for Evaluation and Monitoring of the Program, in keeping with the functions described below.

1. The Implementing Unit

- 3.2 The IU will have the following responsibilities: (i) to ensure the participation of the other state secretariats in the call for bids and supervise the different components, as per the area of responsibility of each; (ii) to submit the operational plans for implementation; (iii) to approve the bidding procedures together with the state of Acre's Permanent Commission on Tenders; (iv) to monitor and evaluate the Program, verifying the attainment of periodic results and goals; (v) to publicly disseminate results, monitoring reports, and progress made by the Program; and (vi) to render viable the efficient functioning of the Commission for Evaluation and Monitoring of the Program, collecting the suggestions that derive therefrom and taking the corresponding measures.
- 3.3 The IU will keep adequate accounting and financial records that make it possible to distinguish the sources and uses of the Program's financial resources from other resources administered by SEPLAN; will submit requests for disbursement and the appropriate justification for eligible expenditures, the audited financial statements of the Program, and the reports on the use of the Revolving Fund to the Bank every six months; and it will maintain and control a specific bank account for administering the loan resources and accounting records for counterpart resources.
- 3.4 To perform its functions, the IU will have a coordinator, a professional with experience in project implementation, who will report directly to the Secretary of SEPLAN; a technical specialist in charge of submitting the Program's operational plans and the plans for monitoring and evaluation; a specialist in procurement in charge of approving the bidding procedures; a legal adviser, entrusted with legal matters; and a specialist in financial administration. **The creation of the**

Implementing Unit and the formal designation of the coordinator by SEPLAN will be a condition precedent for the first disbursement.

2. The State Secretariats

- 3.5 The following state secretariats participate in the Program, in keeping with their sectoral functions: The State Secretariat for Production (SEPRO), the State Secretariat for Science, Technology, and Environment (SECTMA), and the State Secretariat for Infrastructure (SINFRA). These

Secretariat	Subcomponents
SEPRO	Land management Establishment and management of protected areas Transfer of technology Support for traditional populations and small producers Management of forest resources
SECTMA	Strengthening the environmental management system Support for the preservation of traditional cultures Generation of technology
SINFRA	Overland transportation Improvement of the river network Alternative energy
SEPLAN	Business promotion

secretariats will support SEPLAN in preparing and developing the bidding procedures; preparing annual reports on contract supervision; and providing information needed to administer and oversee the Program, including the submission of monitoring reports. The support of these secretariats in each subcomponent is detailed in the box.

- 3.6 The bidding documents prepared by the state secretariats will be sent to the IU, which will proceed to contract the various consultants and works, and to procure the goods and services included in the program. The IU will process the requests for disbursement to the Bank, and will make the payments to the contractors. The state secretariats will supervise the contracts, with the support of consultants in the case of construction on BR-364, and will submit reports to the IU every six months.

3. The management firm

- 3.7 A management firm will support the IU and the state secretariats with the technical, administrative, financial, and bidding procedures, and with supervision of the works included in the Program. The functions of the management firm will be: (i) to provide advisory services in the preparation and monitoring of the calls for bids for the different works, procurement of goods and consultancies, including the dissemination of model bidding documents and terms of reference for works, goods and services; (ii) to prepare the requests for disbursement; (iii) to consolidate the reports on supervision of contracts prepared by the different state secretariats; (iv) to perform the control and monitoring of the firms supervising the works; (v) to supervise the socio-environmental impacts of the Program, verify the implementation of mitigation measures in works contracts, and recommend corrective measures to the environmental authority, as appropriate; (vi) to prepare annual reports on implementation, environmental audits of works,

maintenance reports, the ex-post evaluation and to control the completion of contractual conditions of the Program; (vii) to establish the system for monitoring and evaluating the Program in the IU; and (viii) to monitor implementation of all the contractual clauses in the loan agreement. **Prior to the first disbursement of the loan, the Borrower should publish the notice of tender for the selection and contracting of the management firm, in keeping with the documentation previously approved by the Bank. Eight months after the signing of the agreement, the management firm will be contracted.**

4. Commission for Evaluation and Monitoring of the Program

- 3.8 The Commission for Evaluation and Monitoring of the Program will evaluate and monitor the Program's progress and will be the forum for the appropriate consultation with the interested and affected parties during implementation of the operation. This Commission will be the mechanism by which the IU will disseminate the results, monitoring reports, and actions of the Program to civil society, as well as the channel through which civil society will forward its contributions, suggestions, and criticisms to the implementing agency. The Commission will be linked to the Office of the Governor and will be made up of at least 20 members who would represent state and federal government institutions, indigenous organizations, workers' organizations, business associations, and local and national non-governmental organizations. The Commission will be presided over by the Secretary of SEPLAN and will hold meetings once every six months, with the possibility of special meetings called by the members. The decisions will be made by simple majority. The Program will include US\$ 500,000 to facilitate the participation of the members of this Commission in the meetings and field visits scheduled. **The creation of the Commission for Evaluation and Monitoring for the implementation phase of the Program will be a condition precedent to the first disbursement of the loan.**

B. Implementation mechanism by component

1. Sustainable management and conservation of natural resources

a) Land management

- 3.9 Three specialized consulting firms will perform the tasks involved in land tenure regularization, which are the responsibility of ITERACRE. Each firm will work in one of the three municipalities of Tarauacá, Feijó, and Cruzeiro do Sul, which were selected using the following criteria: (i) number of agrarian conflicts, (ii) number of properties covered by the cadastral survey, and (iii) percentage of the population under the poverty line. The sequential steps of this process are presented in Box 1.
- 3.10 To enable ITERACRE to support tenure regularization of federal lands under the charge of INCRA, to coordinate the activities of regularization and approval by

IMAC of the *Termo de Reserva Legal Ambiental*, and to make possible the massive processing of the land tenure regularization documents in the registry to cut unit processing costs, it is necessary that **prior to the first disbursement of the *Land Management* subcomponent, the following be submitted to the Bank: (i) a cooperation agreement signed by INCRA and ITERACRE delegating the authority to effectuate the process of tenure regularization of federal lands and the process of titling INCRA settlements within the municipalities chosen; (ii) an agreement signed by IMAC and ITERACRE spelling out the cooperation actions for the work of delimiting and registering the environmental legal reserve of the lands; and (iii) a cooperation agreement signed by ITERACRE and the Judicial Branch of the State of Acre establishing the actions for expediting the registration of**

Box 1

Process of land tenure regularization

- a. Compilation of legal, cartographic, and environmental information for preparing an assessment of occupation.
- b. Carrying out a campaign to disseminate the work of land tenure regularization and a call, by edict, to the occupants of real properties to present the documents related to their tenure.
- c. Carrying out the technical visits to each property, comparing the field data with the titles entered in the property registry, identifying the occupants, resolving conflicts, and reviewing the environmental characteristics of the land so as to later designate it. During this stage, the cadastral survey is carried out, and the corresponding geo-referenced topographical plan will be drawn up. This cadastral information will make it possible to build SITACRE's digital database.
- d. Preparation of the technical report that contains the physical, economic, and environmental description of the area. A legal opinion is prepared on the latter, defining the cases found, and then regularization proceeds from there.
- e. Regularization of tenure on private lands, which would receive a title acknowledging property rights, if productive, conflicts with informal occupants have been resolved, and the land is productive. If they are not productive, INCRA would proceed to expropriate them.
- f. Support for regularizing the tenure of federal lands by INCRA at (a) its settlements, in which case the definitive titles will be drawn up, and (ii) other public lands, in which case the regularization is to proceed if the occupant meets the legal criteria or they are converted to conservation units. In the latter case, they may be environmental protection units, state forests, or extractivist reserves. For the reserves, use concessions will be drawn up.
- g. Preparation of the environmental documents certifying compliance with the environmental legal reserve.
- h. Entry of the titles and use concessions in the property registry.
- i. Conveyance of the registered documents to the beneficiaries.

regularized properties.

- 3.11 The execution of this work is detailed in the terms of reference of the respective contracts. In order to have broad dissemination of the regularization process to governmental entities and non-governmental organizations, manuals and technical rules for this process will be prepared. It is necessary that **the manuals and technical rules of the procedures for land tenure regularization be submitted to the Bank prior to the first disbursement for the subcomponent *Land Management*.**
- 3.12 The planning, coordination, and direct supervision of the tasks of land tenure regularization will be undertaken by a team headed up by a manager/administrator, a professional with experience in the design and/or implementation of projects for regularizing land tenure, and extensive knowledge

of the clarification of property rights who will answer to the Secretary of the SEPRO. The manager/administrator will have the support of a legal adviser experienced in conflict resolution, three lawyers as legal supervisors, six engineers as technical supervisors, one agronomist, and one legal specialist with field experience, and a specialist in cartography and geographic information systems. This team will have resources to contract: (i) a study for defining processes and preparing technical standards and operational manuals for the process land tenure regularization, (ii) training staff from ITERACRE, and (iii) short-term consultancies on legal issues. This team will report to the Secretary of SEPRO, which will perform the support tasks by delegation of ITERACRE. **Prior to the first disbursement of the *Land Management* subcomponent, the contract signed by SEPRO and ITERACRE, regulating implementation of the subcomponent, will be submitted.**

- 3.13 In order to make possible the link of ITERACRE with the registry offices (*cartórios*), the offices of the Municipal Cadastre Units, and the Environmental Information System of IMAC, a specialized firm will be contracted to design and another to implement the State Information System on Land Use and Land Tenure (SITACRE). SITACRE will be consistent with the new Public Registry System created in May 2001 by Federal Law 10267/01, and will be integrated into the National Cadastral System and the Rural Information System of INCRA.

b) Establishment and management of protected areas

- 3.14 The plan for implementing the State System of Protected Natural Areas, to be developed by a specialized firm, will define aspects such as management categories, the procedure for creating public and private conservation units, the procedure for drawing up and approving management plans, and aspects related to income generation. A higher education institution will offer 600 hours of training to SEFE staff in natural resources management, management of visits, techniques of environmental education, community participation and conflict resolution, and training of park guards. The management plans will define the management activities to be developed in the three comprehensive protection units to be created, will include programs on environment, public and operational uses, and will present a physical-financial timeline for implementation. The management plans will be presented for public consultation, and implementation will be accompanied by the council of the comprehensive protection unit to be created in keeping with the forestry legislation in force. The access roads and control posts included within the subcomponent should correspond to the management plans.

c) Strengthening the environmental management system

- 3.15 The SEAIM to be designed and implemented by a specialized firm should make possible the registration of environmental information; the systematization and automation of internal technical, administrative, and legal procedures in the area of data management, licensing, surveillance, and oversight; the interconnection with other information systems, including the ITERACRE one; and the

dissemination of environmental statistics to users via Internet. An expert in environmental and geographic information systems will be contracted to supervise the design and implementation of the SEAIM. Four professionals in environmental management and two in environmental law will bolster the regional IMAC offices in Cruzeiro do Sul, Sena Madereira, Feijó, and Assis Brasil. A chemical engineer and a lab assistant will support the start-up of the wastewater laboratory. The training actions and basic studies will be performed by specialized private firms.

d) Support for preserving traditional cultures

- 3.16 The preparation of the Inventory of Traditional Cultures, the creation of a bank of systematized data that makes it possible to store information on the culture of these populations, and the preparation of a plan for the dissemination of research will be entrusted to an institution experienced in preparing research projects in the human sciences and sociocultural surveys in the Amazon region.

2. Support for and promotion of sustainable productive development and employment

a) Generation and transfer of technology

- 3.17 As regards *generating technology*, a higher education center will train 30 FUNTAC staff in the areas of technology for timber and non-timber processing of forest resources and medicinal plants. The center for professional training in forestry and management and processing of timber operations will be used to train technical experts from the forestry sector in the areas of management (planning, forestry techniques, extraction, job safety) and processing (cutting, drying and preservation, safety, administration). The maintenance and administration of the locale will be a responsibility of the National Industrial Learning Service (SENAI), a federal institution charged with providing technological support to the business sector. Accordingly, **prior to calling for bids for the construction and equipping of the center for professional training in forestry and management and processing of timber operations, the Borrower shall submit the agreement between SENAI and FUNTAC spelling out the responsibility of SENAI for operating and maintaining the works and equipment.**
- 3.18 As regards *technological transfer*, the seven offices of EMATER/AC to be built will be located in the municipalities of Acrelândia, Epitaciolândia, Jordão, Santa Rosa, Marechal Taumaturgo, Porto Walter, and Rodrigues Alves. The multi-institutional regional offices will be located in Cruzeiro do Sul, Tarauacá, Sena Madureira, and Brasileia, and will operate jointly with SEPRO, ITERACRE, SEFE, and IMAC.

b) Support for traditional populations and small producers

- 3.19 The beneficiaries will be organized groups or associations of rural producers¹ legally constituted six months prior to the submission of their proposal, whose members have an income less than 1.5 times the minimum wage, and who are preserving forested areas. The beneficiaries will submit proposals for specific investment or services delivery projects, which will be prepared with resources from the subcomponent, and they will be evaluated by an independent academic entity with no less than five years experience in project evaluation, hired for that purpose. The evaluation of specific projects will be done in keeping with the following criteria for eligibility: (i) be consistent with the environmental legislation; (ii) show end-user demand for the product; (iii) have consistency among the objective, the activities, and the costs; (iv) increase the members' expected family incomes more than 10%; (v) be participatory, fostering, in particular, the participation of women and youths; and (vi) have an implementation period inserted within the timeline for implementation of the Program.
- 3.20 Approving the specific projects will be a responsibility of an Executive Council, which will be made up of the SEPRO, which shall preside over it, the Secretariat for Technical Assistance and Guarantee of Production, the Executive Secretariat for Agriculture, the SEFE, the Executive Secretariat for Industry, Commerce, and Tourism, a representative of the cooperatives of Acre, the Federation of Agricultural Workers of Acre, the Union of Indigenous Nations, the National Council of Rubber Tappers, and one representative from the entities that support the small producers and traditional populations. The approval process will be by vote, and the decision will be by simple majority. The President of the Council will cast a tie-breaking vote.
- 3.21 Once the projects are approved, the beneficiary and SEPLAN, as the Program's implementing agency, will sign an implementation agreement, which will define the goods to be procured or the services to be contracted by SEPLAN and transferred to the beneficiary, and will indicate the financial resources that each of the parties will contribute, the timeline for implementation, the responsibility for maintenance of the work and equipment by the beneficiary, and the scheme of payments to the contractor, subject to the approval of the beneficiary of the last disbursement, and the dispute settlement mechanism. The project proposal will be the technical annex to the agreement. **Submission of the model agreement to be entered into by SEPLAN and the beneficiary will be a condition precedent to the first disbursement of the subcomponent.**
- 3.22 SEPRO will monitor preparation of the projects, evaluating both the proposals and the suppliers of goods and services, and will issue the call to the Executive Council to approve the projects. Three professionals with experience in project monitoring and evaluation will be contracted for this purpose.

¹ The beneficiaries should have up to 100 ha, in the case of small producers; up to 50 ha, for riverine and extractivist producers; or demarcated indigenous areas, for indigenous groups.

- 3.23 Given that this subcomponent entails transferring public resources to private beneficiaries, it is necessary to have a law that regulates administration of the resources. This law is now in the form of a draft, which is consistent with the design of the subcomponent. In addition to the law, implementation of the resources will be governed by Operating Regulations, which define the mechanisms for implementation by line of support; the number of investment options; percentages of co-financing and ceilings of contribution per beneficiary (see the summary table below); the criteria for eligibility of beneficiaries and projects; the procedures for nominations and approvals; the monitoring and evaluation system; the mechanisms for disbursements and control; and other relevant aspects of implementation. The Bank's procedures shall apply to both the procurement of goods and the contracting of services. **The entry into force of the Operating Regulations, previously agreed upon with the Bank, for the use of resources and the corresponding law, shall be a condition precedent to the first disbursement of the loan.**

Line of support	% cofinancing	Ceiling (US\$) ¹
Project design		
Specific studies of productive projects	100%	US\$ 15/associate US\$ 1,500 per study
Projects for sustainable production and income generation		
Recovery of altered areas	95%	US\$ 332/associate US\$ 10,000/project
Promoting organic stock-raising	95%	US\$ 270/associate US\$ 10,000/project
Promoting productive linkages	90%	US\$ 1,700/associate US\$ 30,000/project
Sustainable extraction of forest resources	90%	US\$ 2,000/associate US\$ 50,000/project

¹ Ceilings used estimated based on studies of demand and unit costs of production.

c) Sanitary defense and inspection

- 3.24 The updating of the state's sanitary legislation and the preparation of the studies for strategic planning, control and eradication of pests, and designing the monitoring and evaluation system shall be done by specialized firms that have at least ten (10) years experience in the design and/or implementation of forestry and agricultural sanitation. The strategic planning study of the Department of Sanitary Defense and Inspection of SEPRO will define objectives, functions, and infrastructure, personnel, and equipment needs, and will include an operational plan for its institutional modernization. An institution of higher learning will offer the training courses in the areas of sanitary defense, epidemiological surveillance, risk analysis, and quality control of local specialty products.

d) Forest resources management

- 3.25 Institutions of higher learning will provide 1,830 course hours of technical and practical training, and continuing education events in the areas of timber and non-timber forest management, monitoring socio-environmental impacts in forestry operations, production techniques, forestry certification, and forestry policy. The

technical and financial studies for implementing the state production forests will include forestry policy in the legal and institutional areas, management of conservation units, and studies of markets, economic and environmental viability of concessions, and estimated rate of royalty per area or volume, to capture economic rent and cover the costs of regulating and maintaining the area. The studies will be performed by specialized firms experienced in the management of Amazonian production forests.

e) Business promotion

- 3.26 The beneficiaries will be businesses, consortiums of enterprises or organizations of entrepreneurs and producers located in the state of Acre. The beneficiaries will present their requests for the use of resources, which will be evaluated based on the following eligibility criteria: (i) financial capacity and experience of the beneficiary; (ii) quality of the work plan; (iii) private internal rate of return not less than 10%; (iv) existence of a stable and assured flow of production, in the case of large-scale marketing campaigns; (v) environmental impacts; and (vi) degree of dissemination and potential adoption by third parties, in the case of the strategic demonstration firms.
- 3.27 Once the application is approved, the beneficiary and SEPLAN, as the Program's implementing agency, will sign a contract that will define the goods to be procured and services to be contracted by SEPLAN and transferred to the beneficiary, and indicate the financial resources that each of the parties will contribute, the timeline for performance, the scheme of payments to the contractor subject to the approval of the beneficiary of the last disbursement, the submission of a final evaluation report by the beneficiary, and the dispute settlement mechanism. The approved application will be the technical annex to the contract. **The submission of the model contract to be entered into between SEPLAN and the beneficiary will be a condition precedent to the first disbursement of the subcomponent.**
- 3.28 A group of professionals will support SEPLAN in the technical evaluation of applications and supervision of the service contracts. A professional will be hired with an MBA and solid knowledge of finance and evaluation who is fluent in English and has at least 10 years experience in activities related to generating and following through on business transactions. This professional will answer to the Secretary of SEPLAN and will be supported by an economist or business administrator in charge of putting together and ensuring the viability of a portfolio of 10 products with productive linkages; a specialist in microenterprise in charge of receiving, evaluating, and approving applications; and a legal adviser. These consultants will have resources from the Program to articulate and implement the investment projects.
- 3.29 Given that this subcomponent entails transferring public resources to private beneficiaries, a law is needed to regulate administration of the resources. This law is currently in draft form, which is consistent with the design of the

subcomponent. In addition to the law, the execution of resources will be governed by Operating Regulations, which define the mechanisms for carrying out the three lines of action; the menu of investment operations; percentages of co-financing and ceilings on contribution per beneficiary (see table below); the eligibility criteria; the nominations and approvals process; the monitoring and evaluation system; the disbursement and control mechanisms; and other relevant aspects of implementation. Bank procedures will be used both for procurement of goods and for the contracting of services. **The entry into force of the Operating Regulations previously agreed upon with the Bank, for the use of the resources, and the corresponding law will be a condition precedent to the first disbursement of the loan.**

Line of support	Beneficiary(1)	% cofinancing	Ceiling(2)
I. Strengthening and increasing competitiveness of local enterprises and institutions			
Individual entrepreneurial activities	Enterprises	50%	Year: US\$ 3,000 Total: US\$ 11,750
Collective entrepreneurial activities	Consortia	60%	Year: US\$ 5,550 Total: US\$ 22,200
Strengthening the internal capacities of federations and other organizations of entrepreneurs	Associations	50%	Year: US\$ 2,000
II. Marketing			
Small individual marketing	Export firms	50%	US\$ 9,000/project
Small associative marketing	Export consortia	60%	US\$ 10,800/project
Large-scale marketing campaigns	Consortia or Associations for export	10%	US\$ 80,000/campaign
III. Strategic demonstration enterprises			
Associative sustainable forestry management	Consortia	60%	US\$ 90,000/project

1/ Enterprises are juridical persons; consortia are made up of five or more enterprises.

2/ Percentages of co-financing and ceilings were calculated based on a study of demand.

3. Public infrastructure for development

a) Overland transportation

- 3.30 Execution of the works to improve and pave the 70.1 km that are part of highway BR-364 will be divided into two contracts: the first (Lot 1) will cover the 50.1 km between the Liberdade and Tauari rivers; and the second (Lot 2), the following 20.0 km from the Rio Tauari to the Igarape Santa Fé. These contracts will be awarded by international public bidding, with pre-qualification of bidders, following Bank procedures. In order to diminish soil movement and optimize the design of the paving work so as to allow for more rational use of the materials available in the region, the final engineering designs will be reviewed by a specialized firm. **The submission to the Bank for its non-objection to the final engineering designs is a condition precedent to the call for bids for the paving of the Rio Liberdade-Rio Tauari section.**

- 3.31 For the supervision of the road-building on highway BR-364, a specialized consulting firm will be contracted by international public tender. The staff of the supervisory firm will include an environmental specialist who will be in charge of verifying implementation of the environmental specifications and applying the measures to mitigate the direct impacts of the works. The environmental audit, which will perform the oversight of the measures to mitigate the direct and indirect impacts of the works, will be contracted separately. **The contracting of the firms that will perform the supervision of the work and the environmental audit is a condition precedent to the call for bids for paving the Rio Liberdade-Rio Tauari section.**
- 3.32 The rehabilitation of the access road to the Cachoeira Agro-Extravist Settlement Project will be performed by an engineering firm contracted by national public bidding. The contracting of these works will be by price-based competition at the national level; supervision will be entrusted to SINFRA. Given the characteristic of the work, the rehabilitation project should be updated every six months, so as to ensure it remains relevant. Accordingly, **prior to the call for bids, the updated rehabilitation project will be submitted to the Bank for its non-objection; the project should include all the necessary elements for highway safety and environmental protection required to prevent the risk of accidents to the inhabitants of the settlement.**

b) Improvement of the river network

- 3.33 The activities to build small-scale ramps, remove minor obstructions, and post signs along the rivers will be outsourced; SINFRA will be responsible for supervision.

c) Alternative energy

- 3.34 The energy systems will be delivered to the benefitted communities in “*Centros de Florestania*,” conservation units, and settlements in concession. The communities and settlements benefitted were selected based on the following criteria: (i) juridical personality; (ii) social and economic infrastructure; (iii) volume of production; and (iv) minimum distance of 5 km from the conventional power grid. In the case of “*Centros de Florestania*” and settlements, the responsibility for operating and maintaining the systems will be entrusted to the beneficiary entities, with the technical support of SINFRA. **the model contract among SEPLAN, SINFRA, and the beneficiary entity will be submitted as a condition precedent to the first disbursement of the subcomponent; it will establish the duties and rights of each of the parties, including the responsibility of the beneficiary entity for operating and maintaining the system.**

C. Period of execution and schedule of disbursements

- 3.35 The period for the execution of the program will be four years. The following table summarizes the timeline anticipated for the disbursements.

TIMELINE OF DISBURSEMENTS (in millions of US\$)				
YEAR	IDB	LOCAL	TOTAL	%
1	6.5	4.3	10.8	10
2	25.9	17.3	43.2	40
3	22.7	15.1	37.8	35
4	9.7	6.5	16.2	15
TOTAL	64.8	43.2	108.0	100%

D. Environmental and social impact

1. Land management

- 3.36 Clarifying property rights to the land in the municipalities selected helps minimize the impact on biodiversity and environmentally fragile areas that could be caused by the expansion of the agricultural frontier with the paving proposed for highway BR-364.
- 3.37 The legal framework discourages deforestation of the land by occupants who wish to show possession. The forestry legislation protects the forest cover and provides that each occupant of a real property must earmark 80% of the area to an environmental legal reserve. Any occupant who wishes to register his or her property title in the property registry must also register the *Termo de averbação de Reserva Legal Ambiental*, issued by the environmental authority. As part of the activity of land tenure regularization in the Program, the *Termo de averbação de Reserva Ambiental Legal* will be produced and delivered to the beneficiary, with the property title already entered in the registry.
- 3.38 Significant progress has been made in Acre as regards regularizing indigenous lands. Of 28 existing indigenous lands, belonging to 12 peoples, with more than 9,000 persons, 24 groups have already won recognition of their land rights. There are four isolated groups, not yet contacted, for whom there is a reserve of land covering over 400,000 ha. Among the land tenure regularization activities in the *Land management* subcomponent, the following actions are considered for discouraging any type of pressure on the indigenous lands in the area of the works (Katukina and Kaxinawá): (i) wide dissemination of the boundaries of the indigenous lands in the municipality to the population and field contractors; (ii) the participation of the National Indigenous Foundation and representatives of the communities in the processes unfolding in areas neighboring the indigenous lands; and (iii) entry in the property registry of the bounds of properties contiguous to indigenous lands, in keeping with the Law on the Public Registry System.

- 3.39 To ensure broad equity and transparency in the processes of land tenure regularization, compulsory public campaigns will be carried out to provide information on the scope, benefits, and time frames of the process prior to the expert field work. These campaigns will emphasize the equal rights of men and women to title in keeping with the legal provisions. In addition, the results are to be made known to the public, with time frames that enable the more isolated inhabitants to ensure that their property rights are respected. As regards gender, the entry in the registry will be done in the name of the spouses or partners in consensual union in keeping with the law, in those cases where this would apply.

2. The paving of the 70.1 km section of highway BR-364

- 3.40 The paving of an isolated 70.1 km section of highway BR-364 is not expected to bring on the problems that have arisen from similar works in the Amazon region since: (i) the section is 450 km from the next paved section, and so would not allow the flow of possible migrants from other states or from southeast Acre; and (ii) 95% of the section to be built will be protected by the proposed state forest in the area of influence of the work, and by the Katukina Indigenous Reserve, limiting any efforts to settle or deforest.
- 3.41 Nonetheless, the State Government prepared an environmental impact assessment (EIA-RIMA) in 1996, which was revised in 2000. The EIA-RIMA and its respective mitigation plan followed a broad process of consultation with the parties affected, including indigenous groups, through public hearings. The mitigation plan, reviewed and approved by the Bank, includes specific actions in the areas of production, health, education, land tenure regularization, valuing of indigenous culture, environmental management, the obligation to include a code of conduct in the terms of reference for the contractor firms and staff in relation to the local society and the environment, and the strengthening of local organizations.
- 3.42 In addition to the actions of the State Government, the Program includes actions to mitigate disorderly occupations and deforestation in the area of influence of the work, which should be completed prior to the beginning of the work. **Prior to the call for bids for paving the Rio Liberdade-Rio Tauari section of highway BR-364, evidence will be submitted of the culmination of the public presentation of the results of the cadastral survey in the municipality of Tarauacá, to be executed under the land tenure regularization contract within the *Land management* subcomponent; the creation of the state forest in the area of influence of the work in keeping with the legislation in force; and the installation and operation with adequate personnel of two IMAC surveillance posts, in Rio Gregorio and Rio Liberdade.**
- 3.43 While the work of paving highway BR-364 will directly favor the beneficiaries of certified forestry exploitation, the greatest indirect environmental social benefits generated by such sustainable use justify the public investment economically (¶¶4.13-4.16). Accordingly, without the sustainable harvesting of the state

production forest, the paving of highway BR-364 would not be economically viable. **Prior to the call for bids for the Rio Liberdade-Rio Tauari section, a roster will be submitted, prepared by public invitation, of firms interested in sustainable forestry operations in the state production forest to be created in the area of influence. Prior to the call for bids for the work on the Rio Tauari-Igarape Santa Fé section, evidence will be submitted that the work has begun on the Rio Liberdade-Rio Tauari section; and of the adjudication of operations for no less than 35,000 ha in the state production forest in the area of influence, in keeping with the legislation in force.**

3. Supervision and environmental evaluation of the Program

- 3.44 The IU will be responsible for the environmental supervision of the Program, to which end it will have the support of the management firm, which will prepare reports every six months and a mid-term report on the environmental and social impacts of the works and actions carried out under the Program. The evaluation of the Program calls for meeting specific environmental indicators, such as reducing the rate of deforestation and the use of remote sensors and satellite images for measuring it. In the long term, the institutional strengthening activities under the subcomponents *Land management*, *Establishment and management of protected areas*, *Strengthening the environmental management system*, and *Forest resources management* seek to make more efficient and effective use of the State's capacity to manage natural resources and control possible impacts of sectoral actions in these areas.
- 3.45 The public infrastructure works included in the Program have been submitted for environmental assessment and have been or will be licensed, prior to their tender, in keeping with the legislation, and to the Bank's satisfaction. **Prior to the public call for bids for civil engineering works, evidence will be submitted of the respective environmental license and that other possible environmental conditions required have been met.**

E. Procurement of goods and services

- 3.46 The procurement of related goods and services and the contracting for the construction of works will be done by the Borrower in keeping with the Bank's procedures stipulated in the loan agreement. The Procurement Plan is presented in Annex I. The contracting of consultancies will be done in keeping with the procedures outlined in document GN-1679-3, which allows for the contracting of consultants using price as the criterion for evaluation, as well as the selection of fixed-price consultants. With regard to contracting based on quality and price, the relative weight of price as an evaluation criterion may not be greater than 30%; accordingly, the technical element of quality of the bid may not be accorded less than 70%. The international public tender, which will include the pre-qualification of firms, will be obligatory for any procurement whose value exceeds US\$ 350,000 for goods and services, US\$ 5,000,000 for contracts for the construction of works, and US\$ 200,000 in the case of consulting services. These

limits are compatible with those recommended by the Bank's Procurement Unit for the sector in Brazil. Tenders for amounts below the limits indicated shall be done based on the domestic legislation, so long as it is compatible with the Bank's procedures.

F. Lots, rights, and easements

- 3.47 The Program does not pose any land purchase problems. Nonetheless, prior to the call for bids for a specific work, the implementing agency will show the ownership and availability of the lands required for its construction.

G. Recognition of expenses

- 3.48 As recognition of expenses against the local counterpart funding, it is proposed to include the expenses incurred in the 18 months prior to the estimated date of approval of the program for up to US\$ 800,000, used for preparing feasibility studies and engineering designs included in the Program.

H. Accounting, internal control, and auditing

- 3.49 The loan resources and counterpart resources will be channeled through respective bank accounts in the name of the Program, which should be opened for this purpose by the State Secretariat for Finance. SEPLAN, through the IU, will make the payments; maintain accounting and financial records, and internal control system records for managing the Program's resources in keeping with the provision in general clause 7.01 of the loan agreement, to make it possible to identify administration of the Program's resources apart from other programs administered by SEPLAN; prepare and submit to the Bank the audited financial statements, six-month report on the revolving fund, and other financial reports as required; submit the requests and justifications for disbursements to the Bank; and maintain an adequate file of the documentation supporting the contracts and disbursements of Program resources. **The opening by the State Secretariat of Treasury of two exclusive bank accounts for the Program for the use of loan and counterpart resources will be a condition precedent of first disbursement of the loan.**
- 3.50 The annual financial statements of the Program and a management report on the use of the resources within the components *Support for Traditional Populations and Small Producers* and *Business Promotion* will be submitted to the Bank, audited, within 120 days of the close of each economic period. These audits will be performed by an independent auditing firm and selected in keeping with the Bank's policy and based on the previously-approved terms of reference. These audits will continue throughout the period of implementation of the Program and their costs will be financed from the loan resources.

I. Monitoring and evaluation of the Program

- 3.51 The management firm will implement an information system in the IU for monitoring and evaluating the Program. This system will include a database with basic information on quantitative socioeconomic and environmental indicators of the Program's performance and impact. The indicators in the information system used to measure the Program's progress should include at least those that appear in the Logical Framework (see Annex II). The system will be fed by the results of the periodic monitoring reports from the state secretariats, surveys and statistics from state and federal government institutions. In the case of environmental monitoring, the information collected from environmental supervision and environmental audits will be systematized, along with satellite images and remote sensors. The IU will be responsible for maintaining the system, and for disseminating the respective reports.
- 3.52 Sixty (60) days following the conclusion of each six-month period, the IU will send the Bank a report detailing the results of implementation of the operation. This report, to be drawn up with the support of consultants, will present an analysis of the physical and financial progress of the Program, with emphasis on goals achieved, environmental and social impacts of the works and actions, degree to which the beneficiaries are satisfied, performance and processing times of the resources included in the subcomponents *Support for traditional populations and small producers* and *Business promotion*, critical analysis of the problems faced, the corresponding mitigation measures adopted, and the programming for the next year. The Bank and Borrower will agree on the changes and adjustments to the Program that flow from the discussion of these reports.
- 3.53 Twenty-four (24) months after execution begins, the IU and the Bank will undertake a mid-term review of the Program. That review will include, but will not be limited to (i) advances in attaining the Program's goals, (ii) socio-environmental impacts, (iii) the effectiveness of the mechanisms for the participation of civil society, and (iv) contractual performance. The terms of reference for the mid-term evaluation will be the annual reports prepared by the IU, the monitoring reports by the State Secretariats, environmental supervision reports, and the minutes of the meetings of the Commission for Evaluation and Monitoring of the Program. The performance indicators from the Logical Framework will be used, and both the processing time for land tenure regularization and the performance of the resources included in the subcomponents *Support for traditional populations and small producers* and *Business promotion* will be evaluated. The evaluation will also review the effectiveness of the monitoring and evaluation system, as well as the mechanisms for disseminating results.

J. Ex-post Evaluation of the Program

- 3.54 In keeping with the Bank's policy, and in consultation with the Borrower, it was agreed to include an ex-post evaluation as part of the Program's activities. This

evaluation will be financed by the Borrower and will be executed by SEPLAN with the support of the management firm.

- 3.55 This evaluation will be performed two years after the conclusion of Program implementation and will use current economic and environmental indicators as the baseline. The evaluation will include, but not be limited to, (i) an economic analysis of the paving work on BR-364, including indicators of annual traffic, costs of the work, and calculation of the ex-post rate of return; (ii) an analysis of the socio-environmental activities to minimize the environmental risks foreseen by the Program; (iii) an analysis of the cost-effectiveness of the activities for land tenure regularization, including goals attained and economic benefits to the beneficiaries; (iv) the economic impact of the resources included in the subcomponents *Support for traditional populations and small producers* and *Business promotion*, including cost-benefit indicators on the assistance provided and the administrative cost thereof to the state; and (v) a critical evaluation of the mechanisms used to guarantee the participation of civil society in implementing the Program.
- 3.56 In order to make this evaluation possible, within six months from the beginning of execution, the IU will submit to the Bank the economic and environmental data that will make up the baseline to be used to evaluate the Program's results and the description of the procedure to be used to compile and process the annual data that should be compared to the baseline. The Borrower undertakes to keep available the record of data used for the ex-post evaluation and to perform it 24 months after the final disbursement of the loan.

IV. FEASIBILITY AND RISKS

A. Technical feasibility

- 4.1 SEPLAN, with the support of consultants, prepared the technical and environmental studies required for each of the Program's subcomponents. The studies include definition of objectives, description of activities and list of costs, implementation scheme, terms of reference for contracts and technical specifications for equipment, and feasibility analysis. In addition, the studies include supporting legal documentation, such as cooperation agreements or draft inter-institutional contracts.
- 4.2 The works to improve and pave roads included in the Program are not complex nor do they include structures whose construction requires the use of sophisticated technologies. Nonetheless, there are some aspects, particularly in the construction of the paved road, which, due to the scarcity of suitable materials in the region, require certain experience for their implementation, thus the bidding documents for the works, as well as the terms of reference for supervision, will place emphasis on the requirements of experience in such matters.

B. Institutional feasibility.

- 4.3 The Program includes three specific actions to support the current capacity in the institutions participating in Program implementation: (i) the contracting of a management firm, which will make it possible to support the work of the IU in SEPLAN for the duration of the operation; (ii) the contracting of short-term consultancies to support the supervision of investment activities whose duration does not exceed the Program's period of implementation; and (iii) training existing personnel with permanent responsibilities in the areas of administration of natural resources and public services for forestry and agriculture. The last of these actions will make it possible to ensure the institutional sustainability of the investments.
- 4.4 The contracting of the management firm will make it possible to strengthen the IU in order to ensure an adequate pace of implementation for the Program, at the same time as it avoids overburdening the organizational structure of the State with additional personnel and costs.
- 4.5 The state secretariats that will participate in implementation have been participating actively in the preparation of the Program, which has made it possible to gain experience and to give them a sense of ownership. The contracting of studies, consultancies, and specialized services and the works included in the Program do not differ much from the type of activity normally carried out by them. To support the supervision of contracts associated with investments in the subcomponents *Land management*, *Support for traditional populations and small producers*, and *Business promotion*, the Program considers

contracting specialized consulting services, which include, in their terms of reference, transfer of knowledge through training.

C. Financial feasibility

1. Financial situation of the Government of the State of Acre

- 4.6 The following table presents, in summary form, the annual budgetary execution of the Acre State Government for the period 1997-2001. Given that the fiscal accounts for 2001 have yet to be closed, the information included for 2001 is from the projection done for the review of the Program for Restructuring and Fiscal Adjustment with the Federal Government, which took place at the end of 2001, and which is discussed below.

FISCAL ACCOUNTS OF THE STATE OF ACRE
(Millions of Current Reals)

	1997	1998	1999	2000	2001e
Own revenues	101	168	115	166	198
Transfers received	359	407	460	583	630
Current revenues	460	575	575	749	828
Personnel expenditures	(302)	(338)	(345)	(408)	(468)
Other current expenditures	(101)	(167)	(183)	(205)	(221)
Current expenditures	(403)	(505)	(528)	(613)	(689)
Current savings	57	70	47	136	139
Investments	(67)	(100)	(30)	(64)	(101)
Primary results	-10	-30	17	72	38
Debt service	(32)	(41)	(18)	(63)	(77)
Surplus or deficit	-42	-71	-1	9	(39)
Capital revenues	15	13	0	0	0
Lending operations	6	0	2	0	40
Surplus or deficit	(21)	(58)	1	9	1

The exchange rates of the R\$ with respect to the US\$ for the period 1997-2001 were: R\$1.08/US\$ for 1997; R\$1.16/US\$ for 1998; R\$1.81/US\$ for 1999; R\$1.83/US\$ for 2000; and R\$2.40/US\$ for 2001.

- 4.7 The main source of fiscal revenues are the constitutional transfers received from the Federal Government. Own revenues come mainly from the tax on the circulation of merchandise and the provision of services (ICMS). The collection of this tax climbed from R\$ 51 million in 1997 to R\$ 110 million in 2000, due to improvements in tax administration, which moved to focus on the entry of merchandise to the State. Current savings are greater than debt service payments each year. In addition, the primary result has remained positive since 1999. In conclusion, the public finances of the state have evolved positively in recent years.
- 4.8 The State Government has been receiving support from the National Program for Support of the Fiscal Administration of the States (1194/OC-BR) to strengthen the taxation function. This operation is financing US\$ 7.3 million of direct investment in consultancies, training, and systems, one-third of which is earmarked to information technology, one-third to improving oversight, and the

remaining third to organization, management, and taxpayer services. The implementation of this project is practically concluded, with direct effects in the form of the improvements in tax collections noted above.

2. Program for Restructuring and Fiscal Adjustment with the Federal Government

- 4.9 In April 1998, the State Government signed a contract with the Federal Government to refinance debt, under Law 9496/97, which establishes criteria for the Federal Government to consolidate, take on, and refinance debts for which the states are responsible. This contract entails conditions for increasing taxes collected, reducing personnel costs, and establishing a mechanism of coefficients for the sustained growth of the debt under the Program for Restructuring and Fiscal Adjustment. The goals of this program are set for a three-year period, and are reviewed at the end of each year, depending on the evolution of the macroeconomic parameters and the State Government's financial situation. The main commitments assumed by the State Government in this program and the extent of their attainment in the year 2000 are summarized in the following table. As can be observed, it met almost all of the goals agreed upon.

Attainment of goals year 2000, as per evaluation by the Secretariat of the National Treasury		
Indicator	Forecast	Actual
Debt/Real net revenues a/	Less than 1.22	1.22
Primary result b/	R\$ 58 million	R\$ 97.7 million
Personnel expenditures/Net current revenues c/	Less than 62%	43%
Real growth of own revenues	Greater than 11.6%	45%
Investment/Real net revenues	Less than 22%	8%

a/ Current revenues minus financial revenues, revenues from sale of assets, and transfers received to cover capital expenditures; minus statutory transfers to FUNDEF, and minus constitutional and statutory transfers to municipal governments.

b/ Total non-financial revenues, minus constitutional and statutory transfers to municipal governments, minus non-financial current and capital expenditures.

c/ Current revenues minus constitutional and statutory transfers to municipal governments.

- 4.10 The goals agreed upon for 2001 are consistent with the progressive improvement experienced in recent years. Since the State Government is still closing out the accounts for 2001, the existing information makes it possible to estimate that the goals will be fully met.

3. Impact of the Program on the public finances of the State of Acre

- 4.11 The Program's impact on the State's public finances was analyzed both by capacity of the State Government to service the debt associated with the loan and by its capacity to generate the annual resources needed for covering the recurrent costs derived from the Program once the implementation phase has concluded. To this end, fiscal financial projections were made using the same assumptions for growth of state GDP, inflation, and fiscal performance implicit in the last Program for Restructuring and Fiscal Adjustment signed with the Secretariat for the National Treasury. The values projected for the first three years are consistent with the agreements reached in that program. The following table summarizes the capacity of the State Government to generate resources after covering payment of the existing debts and before taking into account the Program of concern to us here, or other investments.

GENERATION OF STATE FISCAL RESOURCES
(Millions of Current Reals)

	2002	2003	2004	2005	2006
Own revenues	210	224	243	263	285
Transfers received	669	715	764	816	871
Current revenues	879	939	1006	1079	1156
Personnel expenditures	(488)	(518)	(546)	(575)	(606)
Other current expenditures	(234)	(250)	(261)	(273)	(285)
Current expenditures	(722)	(768)	(807)	(848)	(891)
Current savings	157	171	199	231	265
Debt service	(87)	(91)	(94)	(104)	(109)
Available resources	70	80	105	127	156

- 4.12 These available resources should be compared with the flows derived from the Program (financial flows and incremental operating costs), which is done in the following table. As can be observed, there is sufficient financial capacity to cover them, and a sum still remains for additional investments. It should also be noted that in the review of the Program for Restructuring and Fiscal Adjustment, signed in 2001, the Program is taken into account both with respect to the Bank loan and the counterpart contributions by the State of Acre. In view of the foregoing, the Program is considered financially viable.

GENERATION OF STATE FISCAL RESOURCES
(Millions of Current Reals)

	2002	2003	2004	2005	2006
Available resources	70	80	105	127	156
Investments of the Program	(55)	(87)	(108)	(49)	0
Bank Loan	33	52	65	29	0
Service on the Bank Loan	0	0	0	0	(8)
Incremental Costs	0	0	0	0	(9)
Amount remaining	48	45	62	107	139

D. Economic feasibility of the work of paving BR-364

- 4.13 To determine the economic viability of the paving of 70.1 km of the isolated section of BR-364, the internal rate of return (IRR) and net present value (NPV) of the difference between the net benefits generated by the situation with and without the project were calculated, i.e. the savings in operating and maintenance costs of vehicles that normally use the road, and the generation of new traffic of forest products (certified timber in uncut logs from the state forests to Cruzeiro do Sul) and non-forest products, once the work is completed.
- 4.14 The estimate of the normal vehicular demand was based on a count done in 1995, the composition of the traffic that same year, and the assumption of an exponential increase of this flow over time. It was assumed that the new traffic in non-forest products represented 25% the first year after completion, and that it would be 50% thereafter. In the case of the new traffic in forest products, the number of trips to be made along the road was calculated based on the estimated

long-term annual production of timber to be transported² and the carrying capacity of vehicles to be used (trucks with a capacity of 22 m³ and 27 m³). Considering a savings of US\$ 1.45/km in transportation by paved versus unpaved road, the new traffic will generate an estimated fixed benefit of US\$ 3.4 million per year.

- 4.15 For calculating the economic profitability of the work, the costs were estimated considering the necessary investment (including costs of construction and supervision of the work) at efficiency prices in a period of two years, as well as the operating and maintenance costs of the work, assuming a time horizon of 20 years and a discount rate of 12%. The NPV was estimated at US\$ 1.3 million, and the IRR was 13%.
- 4.16 This calculation does not include the environmental benefits that would result from sustainable forest management and the extraction of certified products from the state forests. Taking as a reference the annualized value of these benefits (¶4.21), estimated at US\$ 17.44/ha, and assuming conservatively that one hectare of managed forest yields only 50% of the benefits of one hectare of virgin Amazon forest, the environmental benefits derived from the areas to be benefitted by the work would reach US\$ 5.7 million/year. The social IRR of the work, considering these environmental benefits, would be 35%.

E. Socio-environmental feasibility

- 4.17 As indicated above, the environmental strategy of the state authorities, supported by the proposed Program, consists of limiting the expansion of the agricultural frontier to no more than 16% of the state over 20 years, reducing the rate of deforestation from 0.4% to 0.3% per year. According to current Brazilian law, deforestation in the Amazon can be no more than 20% of the area of each property. This goal will be attained by (i) establishing a state system of conservation units for direct and indirect use and the consolidation of indigenous lands and extractivist settlement projects, making it possible to expand the protected areas of the state from 33.5% to 58% of the total area; (ii) developing sustainable forestry activities; (iii) consolidating the occupation of the southeast part of the state, where most of the population lives, by increasing agricultural productivity and seeking economic alternatives that reduce pressure on the land; and (iv) strengthening the state's capacity for monitoring and environmental control of Acre.
- 4.18 From the environmental standpoint, the Program was specially designed for the development of the State to be carried out by addressing existing environmental liabilities (degradation of deforested areas), and, in particular, preventing new negative impacts in the future. Therefore, the main socio-environmental problems that can be foreseen would occur if the Program's actions are not carried out as provided for.

² An annual volume of 490,000 m³ of timber to be transported was estimated, assuming a conservative rate of extraction of 22 m³/ha, and rotation of 30 years, on nearly 674,000 ha of forest that would benefit.

F. Participation of civil society

- 4.19 During the phase of preparing the Program, civil society participated very actively, particularly in the 12 meetings of the Commission for Evaluation and Monitoring, with 52 members representing all sectors and actors involved; the Commission had been created by decree. In addition, a series of specialized meetings were held with those interested in particular parts of the Program, such as forestry, livestock, farming, industry, extractivist activities, indigenous populations, and NGOs. All these meetings were documented and recorded, and the Bank missions attended some of them. Several other participatory mechanisms were worked into the Program. Civil society participates in the State Council on Science, Technology, and the Environment, the State Council for EEZ, the State Forestry Council, and the Executive Council in charge of approving the projects that will be financed under the subcomponent *Support to traditional populations and small producers*.
- 4.20 During the implementation phase, civil society will continue to be adequately consulted and informed of the Program's actions. To this end, the Commission for Evaluation and Monitoring of the Program will be created; it will include broad representation of all the state's social actors. The IU will periodically disseminate, through this Commission, the results of the management and impact of the Program, as well as the technical and environmental reports of the management firm and of the environmental audits.

G. Benefits and beneficiaries of the Program

- 4.21 The main economic benefits expected from the Program will be generated mainly by³: (i) the foregone losses of biodiversity, resources, and carbon sequestration from the conservation of 352,000 ha, as the annual rate of deforestation is cut from 0.4% to 0.3% in 20 years; (ii) the net expected return from the sustainable use of forest resources on one million ha of state forests; and (iii) the net expected benefits of recovering 45,000 ha of degraded lands and the conversion to environmentally sustainable and more profitable agricultural activities of 30,000 ha of pastureland (10% of the total in each case).
- 4.22 The benefits expected from the Program are only attainable if there are strong disincentives to predatory forestry activity (e.g., indiscriminate cutting of trees for the later use of soils for pasture). The Program includes actions to reduce access to forest lands by establishing an adequate capacity for surveillance and oversight of the land in the public sector, and by clarifying property rights to the land.
- 4.23 The Program qualifies as a PTI/SEQ project given that its benefits are geographically focused on one of the poorest states of Brazil, with quality-of-life indicators below the national average (see Table 1.1).

³Lesser additional benefits will be generated on private lands with clarified property rights. Larger investments are expected on these lands (approximately 10,500 properties, or nearly 25% of all rural properties), mainly in soil conservation.

- 4.24 The areas of intervention of the activities of the *Land management*, *Forest resource management*, and *overland transportation* subcomponents are focused in the two regions of the state (Juruá and Tarauacá-Envira) with the highest proportion of persons with incomes below the poverty line.⁴ In addition, the activities of the subcomponents *Support for traditional populations and small producers*, *Improving the river network*, and *Alternative energy* will directly address the lowest-income rural groups due to the selection or eligibility criteria used. In the rural area, the human development index is half the index for the urban area. Through these subcomponents, an effort is being made to directly increase the level of income and access to assets of some poor 20,000 families (25% of Acre's rural population) from the rural area of Acre, also contributing to break the vicious cycle of poverty-deforestation-environmental degradation.

H. Risks

- 4.25 The paving of the proposed section of BR-364. The construction of highway BR-364 in the 1970s made it possible to integrate Acre, Rondônia, and northern Mato Grosso into the rest of the country. Nonetheless, the lack of adequate land management led to its disorderly occupation and the development of agricultural activities with a low rate of return that spurred on the deforestation of these areas. To minimize these possible impacts, the paving of 70.1 km of highway BR-364 has been conditioned on first completing the following activities in the area of influence of the road-building activity: (i) clarifying property rights in the municipality of Tarauacá; (ii) the establishment of a state production forest; (iii) strengthening the environmental oversight units; (iv) instituting environmental licenses; and (v) evidence of private-sector interest in sustainable forestry exploitation in the state production forests.
- 4.26 Change in the priorities of the State of Acre. The Program fits within the strategic vision of equitable growth of the local economy and preservation of the natural wealth of the Amazon, embraced by the Acre state government. A change in the strategic vision would affect the Program's implementation and the attainment of its objectives. To minimize this risk, the Program has been designed to enable civil society to participate in supervising its implementation. To this end, the Commission for Evaluation and Monitoring of the Program has been created, with representatives of the public sector, both federal and state, indigenous organizations, labor groups, business associations, and local and national non-governmental organizations, and should serve as a forum for consultation, dissemination of results, and taking in suggestions. It is expected that it will be the mechanism which, through twice-yearly meetings and field visits financed from resources of the proposed Program, will make it possible to minimize changes that would limit attainment of the Program's objective.

⁴ The percentage of the population that is poor in Juruá and Tarauacá-Envira is 76.2% and 82.7% of the population. This percentage, for Acre as a whole, is 59.2%.

BRAZIL

ACRE SUSTAINABLE DEVELOPMENT PROGRAM (BR-0313)

PROCUREMENT TABLE

DESCRIPTION	Financing(%)		Method ^{a/}	Expected date of publication (year-semester)
	IDB	Local		
A. GOODS				
Office equipment and materials: UE, ITERACRE, FEM, FUNTAC, EMATER/AC, SEPRO, SEFE, Department of Agricultural Health, Business Promotion Lots: Various Amount:US\$2.744.000	72	28	ICB	2002-II 2003-II 2004-I
Field equipment and inputs: environment, conservation units Lots: Various Amount: US\$605.000	50	50	ICB	2002-II 2003-II
Lab equipment and inputs: IMAC, FUNTAC Lots: 1 Amount: US\$169,000	50	50	LCB	2002-II
Information systems equipment: SITACRE, SEIAM Lots: 2 Amount: US\$1.530.000	100		ICB	2002-II 2003-I
Equipment and materials: Forestry formation center Lots: Various Amount: US\$590.000		100	LCB	2002-II
Posting equipment for river channels Lots: 1 Amount: US\$7.000		100	LCB	2002-II
Bathymetry equipment Lots: 1 Amount: US\$165.000	100		LCB	2002-II
Solar energy generating systems Lots: 1 Amount: US\$1.500.000	60	40	ICB	2002-II
68 land vehicles Lots: 1 Amount:US\$1.660.000	50	50	ICB	2002-II
37 water vehicles Lots: 1 Amount:US\$288.000	50	50	ICB	2002-II
B. CONSULTING AND SPECIALIZED SERVICES				
Management firm Lots: 1 Amount: US\$2.800.000	100		ICB	2002-II
Independent audit Lots: 1 Amount: US\$200.000	100		LCB	2003-I
Feasibility studies and final designs: UE Lots: Various Amount: US\$2.300.000		100	LCB	2003-II
Geodesy, operative manuals, land regularization and cadastre Lots: 5 Amount: US\$5.273.000	88	12	ICB	2002-II
Design of SITACRE and Formulation of a system model for a modern registry Lots: 1 Amount: US\$80,000	100		CPN	2003-I
State system of natural protected areas Lots: 5 Amount: US\$930,000	57	43	ICB	2002-II 2003-I/II
Establishment of integrated protected units Lots: 2 Amount: US\$360.000	100		ICB	2003-I
Management of surrounding areas of the <i>Parque Nacional Serra do Divisor</i> Lots: 2 Amount: US\$300.000		100	LCB	2003-I
Design of SEIAM Lots: 1 Amount: US\$	100		LCB	2002-II
Basic environmental studies Lots: 1 Amount: US\$1.000.000		100	LCB	2003-I
Helicopter rental Lots: Various Amount: US\$718.000		100	LCB	2003-I
Preparation of an inventory of traditional cultures, database y dissemination plan. Lots: 1 Amount: US\$645.000		100	LCB	2003-I

DESCRIPCIÓN	Financing(%)		Method ^{a/}	Expected date of publication (year-semester)
	IDB	Local		
Strategic planning study and design of the management and evaluation system: FUNTAC Lots: 2 Amount: US\$90,000	100		LCB	2003-I
Evaluation system: <i>Support to traditional populations and small producers</i> Lots: 1 Amount: US\$30,000	50	50	LCB	2002-II
Consulting services and studies on agricultural and forestry health Lots: 2 Amount: US\$240,000	67	33	ICB	2003-I
Consulting services and studies for forest resources management Lots: Various Amount: US\$2.970.000	100		ICB	2002-II
Supervision and environmental audit of works on the BR-364 Lots: 2 Amount: US\$2.000.000	50	50	ICB	2002-II
Review of engineering studies for works on the BR-364 Lots: 1 Amount: US\$320.000		100	LCB	2003-I
Clearing of rivers and <i>igarapes</i> Lots: Various Amount: US\$877.000		100	LCB	2002-II
Training: ITERACRE, environment, FUNTAC, EMATER/AC, agricultural health, SEFE, business promotion, SINFRA Lots: Various Amount: US\$1.730.000	27	73	ICB	2002-II 2003-I
C. WORKS				
Headquarters and 3 regional offices: ITERACRE Lots: 4 Amount: US\$190.000	50	50	LCB	2002-II
Access routes and control posts of protected areas Lots: 3 Amount: US\$1.000.000	50	50	LCB	2003-I
Office refurbishing: IMAC, Firefighters and laboratory Lots: 1 Amount: US\$218.000	50	50	LCB	2002-II
Construction of 5 cultural centers Lots: 1 Amount: US\$178,000		100	LCB	2004-II
Refurbishing of laboratories FUNTAC Lots: 2 Amount: US\$159,000	50	50	LCB	2002-II
Construction of the forestry training center Lots: 1 Amount: US\$326,000		100	LCB	2002-II
Construction of municipal and multi-institutional offices and rural points of EMATER/AC Lots: Various Amount: US\$834,000	50	50	LCB	2002-II
Office refurbishing: <i>Support to traditional populations and small producers</i> Lots:1 Amount: US\$40,000	50	50	LCB	2002-II
Construction of headquarters SEFE. Lots: 1 Amount: US\$421,000	50	50	LCB	2002-II
Construction of access and control infrastructure of state forests Lots:4 Amount: US\$450,000	50	50	LCB	2003-II
Rehabilitation 27 km of access road to PAE Cachoeira Lots: 1 Amount: US\$280,000	50	50	LCB	2002-II
Pavement of 70.1 km BR-364 Lots: 2 Amount: US\$28,000,000	50	50	ICB	2002-II
Construction of 4 ramps Lots: 1 Amount: US\$163,000	60	40	LCB	2002-II

a/ ICB: International Competitive Bidding; LCB: Local Competitive Bidding

BRAZIL
ACRE SUSTAINABLE DEVELOPMENT PROGRAM (BR-0313)

LOGICAL FRAMEWORK MATRIX

SINOPSIS	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
OBJETIVE			
To improve the quality of life of the population in Acre and to preserve its natural wealth in the long run.			
PURPOSE			
Modernize the State’s capacity for environmental management and ensure the efficient use of natural resources.	Annual deforestation rate reduced from 0,4% to 0,3%, or less than 50.000 hectares/year, at the end of the Program.	Satellite images in the remote sensing lab of IMAC-FUNTAC at the end of the Program.	<ul style="list-style-type: none">No uncontrolled occupation of new territories occurs.Interest of the private sector exists for the sustainable exploitation of state forests, in accordance with current legislation.Other factors that influence the State’s Gross Domestic Product do not worsen.
Increase the rate of growth of the forestry and agricultural sectors and generate employment.	Real Gross Domestic Product of the forestry and agricultural sectors of the State grows at an annual rate of 5% starting in 2004.	Annual statistics of IBGE	
Cut transportation costs and increase access to rural electrification in Acre.	Savings associated with the paving of 70,1 km in highway BR-364 are US\$4,6 million at the end of the Program.	Monitoring reports of SINFRA at month 48 of execution.	
COMPONENTS/RESULTS			
1. Sustainable management and conservation of natural resources			
<u>Land administration</u> Solution of land tenure irregularities in the State initiated.	<ul style="list-style-type: none">SITACRE established in Feijó, Tarauacá and Cruzeiro do Sul at the end of year 2.5.700 land titles, 1.840 definitive titles for parcels of INCRA/ITERACRE, 3.200 use concessions in 107 extractive locations registered in Feijó, Tarauacá and Cruzeiro do Sul; 4 conservation units for direct use and 3 integrated protected areas demarcated, at the end of the Program.	Monitoring reports of SEPRO at month 24 of execution. Registry documents and reports of ITERACRE at month 48 of execution	Interest of the registries (<i>cartórios</i>) to collaborate in the land tenure regularization exists.
<u>Establishment and management of protected areas</u> State system of protected areas created and functioning and the number of conservation units for indirect use in Acre increased.	<ul style="list-style-type: none">220.000 has of new protected areas established with adequate access and control and consulting councils in operation at the end of the Program.	Monitoring report of SEPRO at month 48 of execution.	Local communities and municipalities welcome the creation of conservation units.
<u>Strengthening of the environmental management system</u> Environmental authority of the State strengthened to supervise the implementation of the environmental legislation.	<ul style="list-style-type: none">80% of big forest fires (greater than 10 has) are attended by the Firefighters at the end of year 2.Time savings of 30% in internal processes of IMAC generated by establishment of the SEIAM at the end of the Program.100% of deforestation above 20 has licensed and enforcement in areas of competence of IMAC at the end of the Program.	Monitoring report of SECTMA at month 24 of execution. Monitoring report of SECTMA at month 48 of execution. Monitoring report of SECTMA at month 48 of execution.	Competence delegation from the Federal Government to the State Government is finalized in the area of environmental legislation.

SINOPSIS	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
	<ul style="list-style-type: none"> 70% of deforestations 20 has licensed and 10% enforced by sample at the end of the Program. 100% of territory monitored for deforestation at the end of the Program. 	Monitoring report of SECTMA at month 48 of execution. Satellite images at month 48 of execution.	
<u>Support for the preservation of traditional cultures</u> Cultural identity of 12 indigenous ethnic groups, extractivist and riverine populations valued	<ul style="list-style-type: none"> At least 70% of benefited traditional populations are satisfied with disclosure centers and support actions of FEM at the end of the Program. 	Opinion survey prepared by SECTMA at month 48 of execution.	Native populations are interested in participating in the cultural information gathering.
2. Support and promotion of sustainable productive development and employment			
<u>Generation and transfer of technology</u> Technological research prioritized and the quality of transfer services modernized.	<ul style="list-style-type: none"> Draft decree for the institutional reform of FUNTAC elaborated at the end of year 2. Plan for increasing the relation extensionists/ administrative personnel from 1,3 to 2,3 in EMATER/AC elaborated at the end of year 2. Visit days per year by each technician of EMATER/AC per producer increased from 2,5 to 5 at the end of the Program. Credit assistance of EMATER/AC reduced from 5.400 to 2.000 annual operations and technical assistance operations increased in 70% at the end of the Program. 	Monitoring report of SECTMA at month 24 of execution. Monitoring reports of SECTMA at month 24 of execution. Monitoring reports of SEPRO at month 48 of execution. Yearbook of EMATER/AC and monitoring report of SEPRO at month 48 of execution.	Private sector is interested in providing credit assistance to rural and forestry producers. Demand exists for services of FUNTAC.
<u>Support to traditional populations and small producers</u> Environmentally sustainable and economically viable practices among rural/forest low-income families stimulated.	<ul style="list-style-type: none"> 20.000 benefited low-income families of small producers and traditional populations at the end of the Program. 45.000 has of degraded pastures recovered, including 30.000 has of reconverted pastures to sustainable agricultural activities, at the end of the Program. Average family income of beneficiaries increased in 10% at the end of the Program. Agro-forestry production increased in 30% at the end of the Program. 	Monitoring reports of SEPRO at month 48 of execution. Statistics of EMBRAPA and monitoring reports of SEPRO at month 48 of execution. Sample household surveys performed by SEPRO at month 48 of execution. Statistics of SEPRO at month 48 of execution.	The estimated demand for the resources in the subcomponent is generated. Rural producers are interested in recuperating and transforming pastures.
<u>Sanitary defense and inspection</u> Forest and agricultural health services in Acre strengthened.	<ul style="list-style-type: none"> Draft legal norms about state agricultural health and the decree for the reform of the health institutional framework completed at the end of the Program. 	Laws and decrees at month 48 of execution.	Private sector is interested in participating in the agricultural health defense and inspection system of the State.
<u>Forest resource management</u> Institutional framework necessary for the efficient management and regulation of sustainable exploitation of forest resources established and certified forestry production increased.	<ul style="list-style-type: none"> The legal framework for the forestry sector completed and state forest authority created with three specialized departments in planning and forest policy; contract administration and production; and protected areas, environmental services and biodiversity at the end of the 	Decree of the Regulation of the State Forestry Law and of the creation of SEFE at month 12 of execution.	Private sector is interested in sustainable management of state forests. Profitability of forestry production in Acre stays current levels or increases.

SINOPSIS	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
	<p>Program.</p> <ul style="list-style-type: none"> 1 million has of state forests created and established for certified forestry extraction, in accordance to current legislation, at the end of the Program. Stumpage fees to capture rents and cover regulation and maintenance costs of the estimated area at the end of year 2. 	<p>Monitoring report of SEPRO at month 48 of execution.</p> <p>Decree for the establishment of the stumpage fee at month 24 of execution.</p>	
<p><u>Business promotion</u> Productive investments that increase competitiveness, generate employment and do not harm the fragile environment increased.</p>	<ul style="list-style-type: none"> 10 projects in articulation process and realized investment is 3 times the amount of resources employed at the end of the Program. 270 support requests to the increase local business competitiveness financed and the ratio “sales of beneficiaries/ sales of non-beneficiaries” is greater than 1 at the end of the Program. 50 small marketing requests financed and the growth rate of sales outside Acre is greater than the global growth rate at the end of the Program. 2 large-scale marketing campaigns financed and the sales of advertised generic products outside the State increased in 10% at the end of the Program. 3 demonstrative sustainable and associative forest-livestock management projects generating similar business initiatives in large scale at the end of the Program. 	<p>Management and impact reports of SEPLAN at month 48 of execution.</p>	<p>The estimated demand for the resources of the subcomponent is generated.</p> <p>The national and state economic situation allows a favorable environment for business promotion.</p>
3. Public infrastructure for development			
<p><u>Overland transportation</u> Road infrastructure improved.</p>	<ul style="list-style-type: none"> 490.000 m3 of certified forestry products (equivalent in stumpage) are transported annually through the BR-364 to Cruzeiro do Sul at the end of year 3. 	<p>Annual monitoring reports of SINFRA at month 36 of execution.</p>	<p>No exceptional weather phenomena that affect the works appear.</p>
<p><u>Improvement of river network</u> The navigability of rivers of the State improved.</p>	<ul style="list-style-type: none"> Production volume transported by river increased in 50% at the end of the Program. 	<p>Monitoring reports of SINFRA at month 48 of execution.</p>	<p>No exceptional weather phenomena that affect the works appear.</p>
<p><u>Alternative energy</u> Rural electrification levels increased.</p>	<ul style="list-style-type: none"> 90% of population in benefited communities is satisfied with the operation of alternative electrification systems. 	<p>Opinion surveys prepared by SINFRA at months 24 and 48 of execution.</p>	<p>Beneficiaries have interest in operating and maintaining the systems. All logistic for the installation of the systems is available..</p>